

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

THE AMERICAN

ELEVATOR AND

GRAIN TRADE



Printed in U. S. A. Entered as second-class matter June 26, 1885, at the Post Office at Chicago, Illinois, under Act of March 3rd, 1879.

Established 1888

PUBLISHED BY
Mitchell Brothers Publishing Co.

A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

One Dollar Per Annum
SINGLE COPIES, 15 CENTS

VOL. XLV

431 South Dearborn Street, Chicago, Ill., September 15, 1926

NO. 3

Of Course

We want your business but we want it on a basis that will pay you as well as ourselves. We want it because we have proper facilities for handling it.

Don't be satisfied with slow returns or poor service; send your shipments to

McKENNA & DICKEY

GRAIN

60 Board of Trade
CHICAGO

GRAIN DRIERS
FEED MIXERS
FEEDERS
STEAM COILS
COOKERS
MOLASSES HEATERS
SPECIAL DRY-



ROTARY DRIERS
TRUCK DRIERS
STERILIZERS
FANS
STEAM TRAPS
OAT BLEACHERS
ING APPARATUS

WILLEY ELLIS COMPANY

Successors to

THE ELLIS DRIER COMPANY

1201-1229 So. Talman Avenue

CHICAGO, U. S. A.

FOR SALE

Grain Elevator in Chicago switching district, 400,000 bu. storage. Immediate possession. Can be purchased at extremely low price, small cash payment. Give us your bid.

Feed Plant in Northern Illinois, immediate possession. A1 grain man is willing to invest \$25,000 with parties understanding feed business.

S. T. EDWARDS & CO.

EXCLUSIVE AGENTS

110 S. Dearborn St., Chicago, Ill.

SAVE MONEY

Rebuilt Electric Motors

All sizes—A. C. & D. C. Motors in stock, from 1/4 horse power to 50 horse power. Exhaust fans, belt and motor driven blowers. Compressors and machine tools for the repair shop.

All our motors carry the "Midland Guarantee." Satisfaction or your money back.

Rebuilt Leather Belting

All sizes from 1" to 8" in stock. Single or double ply.

Let us quote you on your shop needs.

Midland Equipment Co.

612 W. Van Buren St.
CHICAGO, ILL.

"THE CLIMAX" SCOOP TRUCK

CAPACITY { 200 Lbs. Coal
 { 2 1/2 Bushels Grain

Can easily add Twenty-Five cents an Hour to the value of a man's time who uses it in unloading Coal or Grain from box cars.

Hence, in two weeks' use the Scoop-Truck will pay for itself and cost you nothing for its use thereafter. It will last for years and save the wearing out of a dozen common scoops in doing a like amount of work.

Hundreds have tried it and will certify to the truth of these statements. Why not order now and let the Scoop-Truck be giving itself to you?

Patented July 30, 1907

PRICE: \$15.00 F. O. B. cars at factory

Detroit Scoop Truck Co., 993 Osborne Place, Detroit, Mich.

THE MANHATTAN RUBBER MFG. COMPANY

Executive Offices and Factories
Passaic, New Jersey

Manufacturers of Mechanical Rubber Goods of all kinds.
Specialists on Conveyor and Elevator Belting

Branches in leading cities of the United States

GIBSON OAT CRUSHERS GIBSON CORN CRACKERS

Greater Capacity—Less Horse Power
A Better Product at Lower Cost

Write today

GIBSON OAT CRUSHER CO.

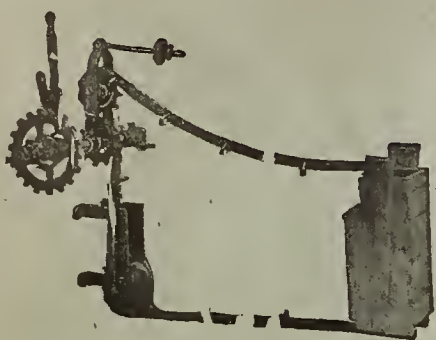
Patentees and Manufacturers

1841 McCormick Bldg.

Chicago

To Elevator Managers

Something you have been looking for. A machine to clean out elevator boot from work floor. H. H. PARLIAMENT, Henry, S. D.

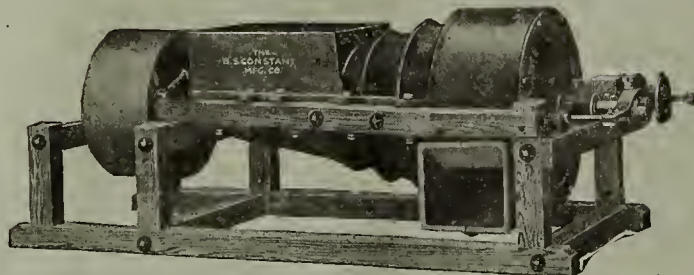


Get Your Grain in—and the Farmer Out—in a Hurry. The Cost Is No More.

Here is your combination for speed and insurance against the costly "Choke-up."

The U. S. Chain Conveyor and Feeder
The U. S. Pitless Corn Sheller
The U. S. "V" Type Elevator Bucket

We build our chain feeders to deliver the capacity of U. S. sheller which is sufficient endorsement of durability and capability.



The "V" bucket completes a U. S. Sheller installation by giving the increased elevating capacity required. Manufactured in all sizes with dies stamping the bucket at one operation from a single sheet of metal.

Priced accordingly

Statement by Owner

"The U. S. Sheller has devoured everything from cog wheels to 40 feet of drag chain and seems to like it. Leaves the cobs cleaner and in better size than other shellers we are operating."



CONSTANT XXth CENTURY CORPORATION

Manufacturers of Grain Elevator Equipment and XXth Century Flour Mills

BLOOMINGTON, ILL.

WE CAN NOW SUPPLY

Elwood's Grain Tables

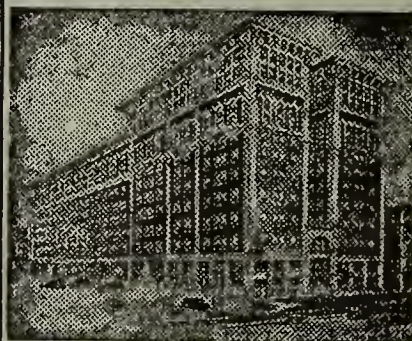
Show the value of any number of bushels or pounds of WHEAT, RYE, OATS, CORN OR BARLEY at any given price from 10 cents to \$2.00 per bushel. One of the most useful books ever offered to millers. Indorsed by prominent millers and grain dealers. Bound in cloth, 200 pages. Mailed on receipt of price.

\$2.00

Mitchell Brothers Publishing Co.
431 S. Dearborn St. Chicago, Ill.

You'll Appreciate

- the Attractive Rates
- the Dining Facilities
- the Handy Location



500 Rooms

Room without Bath . \$2.00 and up
Room with Bath . . \$2.50 and up
Double Room and Bath \$4.00 and up
Room with two single beds and Bath . . . \$5.00 and up
RESTAURANT—COFFEE SHOP
Service at all times 6 a. m. until midnight.

POPULAR PRICES

Hotel Baltimore
12th Street and Baltimore Ave.
KANSAS CITY, MO.

WHY-A-LEAK

—STOP IT—

BAD ORDER CARS

cause the loss of many hard earned dollars to shippers of grain and seed. MUCH OF THIS LOSS can be saved by the use of Kennedy Car Liners. These car liners practically condition a bad order car and enable shippers to load cars that otherwise would be rejected.

KENNEDY SYSTEM of car liners prevents leakage in transit and are made for all cases of bad order cars, consisting of full Standard Liners, End Liners and Door Liners.

WILL YOU NOT give us an opportunity to submit full details of our system and the low cost for this protection?

THE KENNEDY CAR LINER & BAG COMPANY

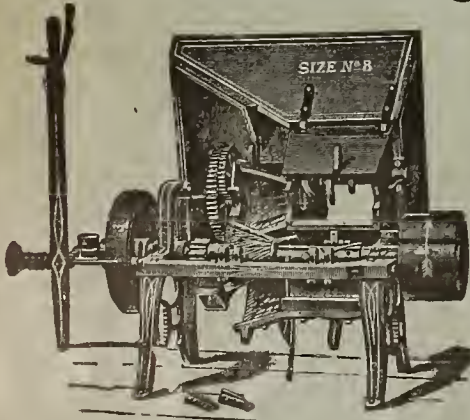
SHELBYVILLE, IND.
Canadian Factory at Woodstock, Ontario

MILLING KINKS

Contains a further selection of the more recent wrinkles published in the AMERICAN MILLER, each fully described and illustrated. Companion to "The Book of Wrinkles"

PRICE, \$1.25 POSTPAID
Mitchell Bros. Pub. Co. 431 S. Dearborn St. CHICAGO

Make Feed Grinding More Profitable!



Bowsher's "Combination" Mills do this

Because their large capacity, cone-shaped grinders and positive self ear feeders are properly designed to direct every ounce of power energy to the actual reduction of the grain.

Crush and Grind ear corn, husked or unhusked, alone or mixed with any kind of small grain in any desired proportion. Reduce the material to any fineness desired for feeding purposes.

11 Sizes, 2 to 25 H.P.

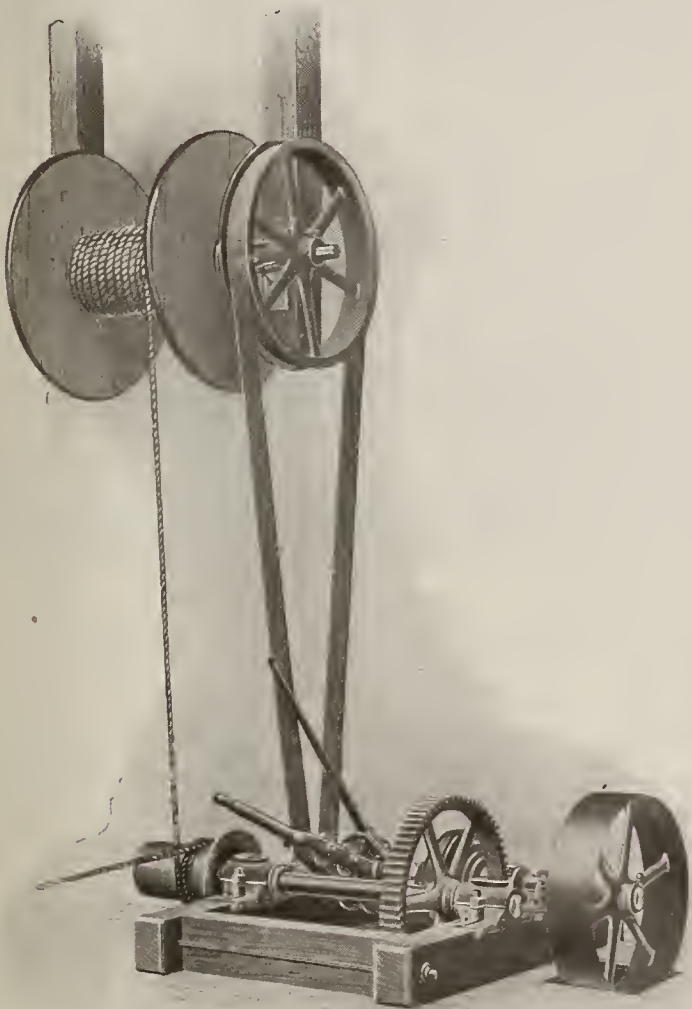
Sold with or without Sacking Elevator.

The N. P. Bowsher Co., South Bend, Ind.

ROPP'S CALCULATOR—Invaluable for grain operators. Tablenshow at a glance the value of wheat, corn, rye, oats, barley seeds, etc., at all market prices per bushel. Trade discounts, stock tables, capacity tables, short-cut arithmetic. Solves all grain problems with lightning rapidity. Price \$1.00

Nordyke & Marmon Company

POWER CAR PULLER



For convenience in spotting empty cars and moving single or trains of loaded cars, the Nordyke & Marmon Company Spur Gear Car Puller, pictured above, will be found most useful and dependable.

It is built in three sizes ranging in capacity from one to twenty loaded cars on level track, and is supplied either with or without rope winding spool and attachments. Plain jaw or friction clutch release on drive shaft is optional.

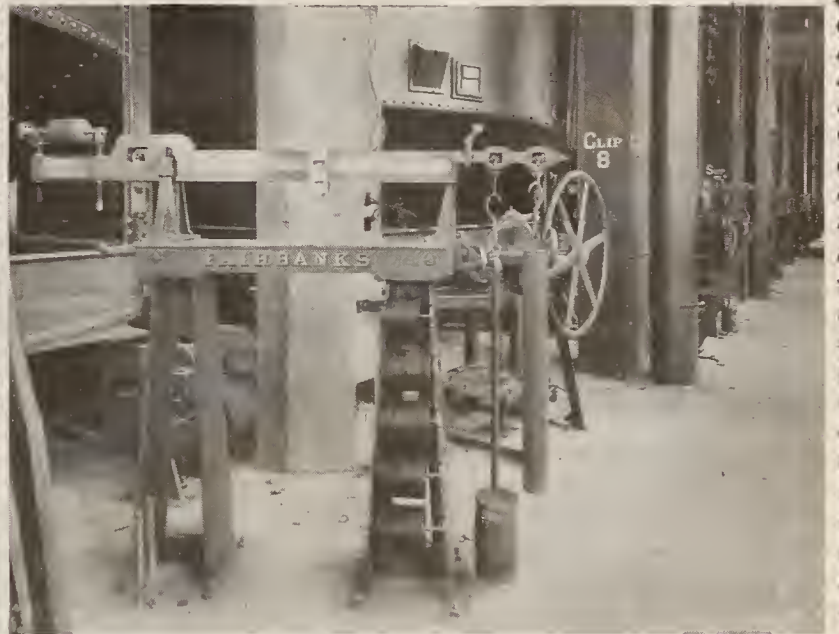
NORDYKE & MARMON COMPANY

Established 1851

Indianapolis

Indiana

AMERICA'S LEADING MILL BUILDERS



Battery of 12 Fairbanks Type "S" Hopper Scales installed in the new, model Santa Fe Elevator "A" at Argentine, Kas.

Used in this giant elevator

Fairbanks Type "S" Hopper Scales were selected for the most vital phase of operation—weighing—in this 6,000,000 bushel elevator. The installation consists of twelve 2500-bushel Hopper Scales and two 800-bushel Hopper Scales, all equipped with the most modern type of registering beams and weight lifting devices to speed up weighing.

So simple are the adjustments in the lever mechanism of these scales, that the entire battery was tested, inspected and accepted in the *record* period of 14 days from the time the installation was completed.

Type "S" construction, used in these scales, provides for transferring the load from the hopper to the scale levers through a flexible combination of suspension elements which allow for the disturbance of emptying the hopper without changing the accurate initial balance of the scale. This scale is easy to erect, and, once set with levers level and connection plumb, remains accurate for years. All knife edges are in full view, making inspection rapid and easy. Fully conforms to specifications of I. C. C. Docket 9009.

There are other Fairbanks Hopper Scales supplementing the Type "S" Scale to meet the requirements of elevators of any size or location.

*If it's weighed on a Fairbanks
there's no argument.*

FAIRBANKS SCALES

Preferred the



World Over

New York

Broome and Lafayette Sts.

Chicago

900 S. Wabash Ave.

And 40 other principal cities in the United States

ASA22.5-2176



Indianapolis—Your Market—A Three Times Greater Grain Market

Indianapolis, the center of grain centers, is known today as one of the most important, rapidly growing grain and hay markets in the country. Receipts of grain during the last ten years have nearly trebled in volume, due to the advantages its geographical location offers to the grain and hay producing and consuming sections of the country, its splendid railroad facilities assuring prompt returns on shipments, its large local consumption of grain by its corn and flour mills and its manufacturing industries, its increased elevator storage and drying equipment, its adequate weighing facilities and efficient inspection department. This has made Indianapolis more and more important each season for shippers and buyers of grain, hay and feed.

Movement of Grain and Hay During the Year 1925

	Receipts	Shipments
Corn	18,838,000 bushels	14,527,000 bushels
Oats	9,016,000 bushels	7,818,000 bushels
Wheat	4,527,000 bushels	2,141,000 bushels

The following Receivers and Shippers are members of
Indianapolis Board of Trade

HAYWARD-RICH GRAIN COMPANY COMMISSION AND BROKERAGE 414-415 Board of Trade Building	WM. R. EVANS, President GEO. H. EVANS, Sec.-Treas. Midwest Elevator Company Incorporated BOARD OF TRADE	FOR SERVICE—EFFICIENCY—COURTESY SHIP TO HART-MAIBUCHER CO. Consignments and Sales to Arrive
THE CLEVELAND GRAIN & MILLING CO. OPERATING FOUR TERMINAL ELEVATORS <i>Mighty Good Consignment Service</i> Ed. K. Shepperd, Manager	WALLACE-GOOD CO. Grain, Stocks, Cotton <i>Operating the James E. Bennett & Co. Wire</i> Room 118, Board of Trade Bldg.	H. E. Kinney Grain Co. COMMISSION—BROKERAGE
THE LEW HILL GRAIN COMPANY G R A I N COMMISSION, BROKERAGE Phone Main 3886		The Bingham Grain Company Receivers and Shippers of G R A I N

WELLER EQUIPMENT

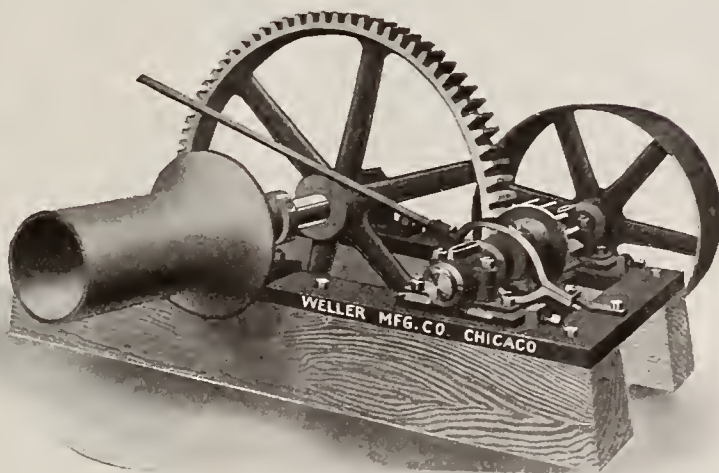
The Better Kind of Grain Handling Machinery
FOR THE LARGE OR SMALL ELEVATOR



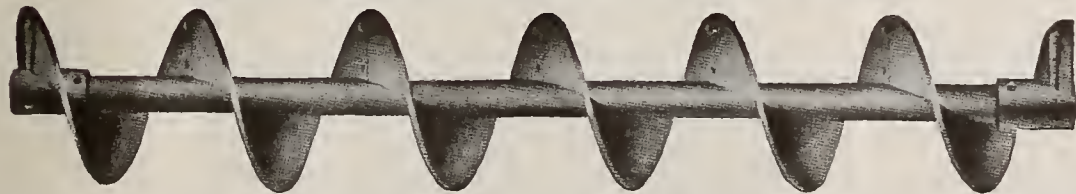
WELLER MARINE LEG
We Make All Types for Unloading Large or Small Boats

WELLER CAR PULLERS

Capacities 2 to 18 Cars. For
Wire or Manila Rope Direct
Connected or For Belt Power.



WELLER SPIRAL CONVEYORS



Cold Rolled Steel Sectional Flights. Wear Long. Evenly Balanced. Run True.
Interchangeable with All Standard Makes.

We Also Make

Aluminum, Brass, Cast Iron, Copper, Galvanized, Monel Metal and Tinned
Spiral and Ribbon Conveyors

Send Us a List of Your Requirements We Will Quote Prices



WE MAKE

Apron Conveyors
Belt Conveyors
Drag Conveyors
Pan Conveyors
Mixing Conveyors
Spiral Conveyors
Trippers
Bucket Elevators
Elevator Buckets
Elevator Boots
Elevator Casing
Elevator Heads
Sack Elevators
Barrel Elevators
Elevator Spouts
Loading Spouts
Dock Spouts
Chain
Sprockets
Truck Dumps
Wagon Dumps
Truck Hoppers
Power Shovels
Car Pullers
Rope Drives
Gears

Power Transmitting
Machinery

Weller made products are sold
on the basis of quality. In-
stalled in your elevator they will
help you to operate at full
capacity at the lowest cost for
upkeep. Frequent shutdowns
and waiting for repairs dissi-
pate your profits.

Your Inquiries and Orders will be Appreciated

WELLER MFG. CO.

Main Office and Works,

1820-1856 N. Kostner Ave.

Chicago, Ill.

SALES OFFICES:

NEW YORK

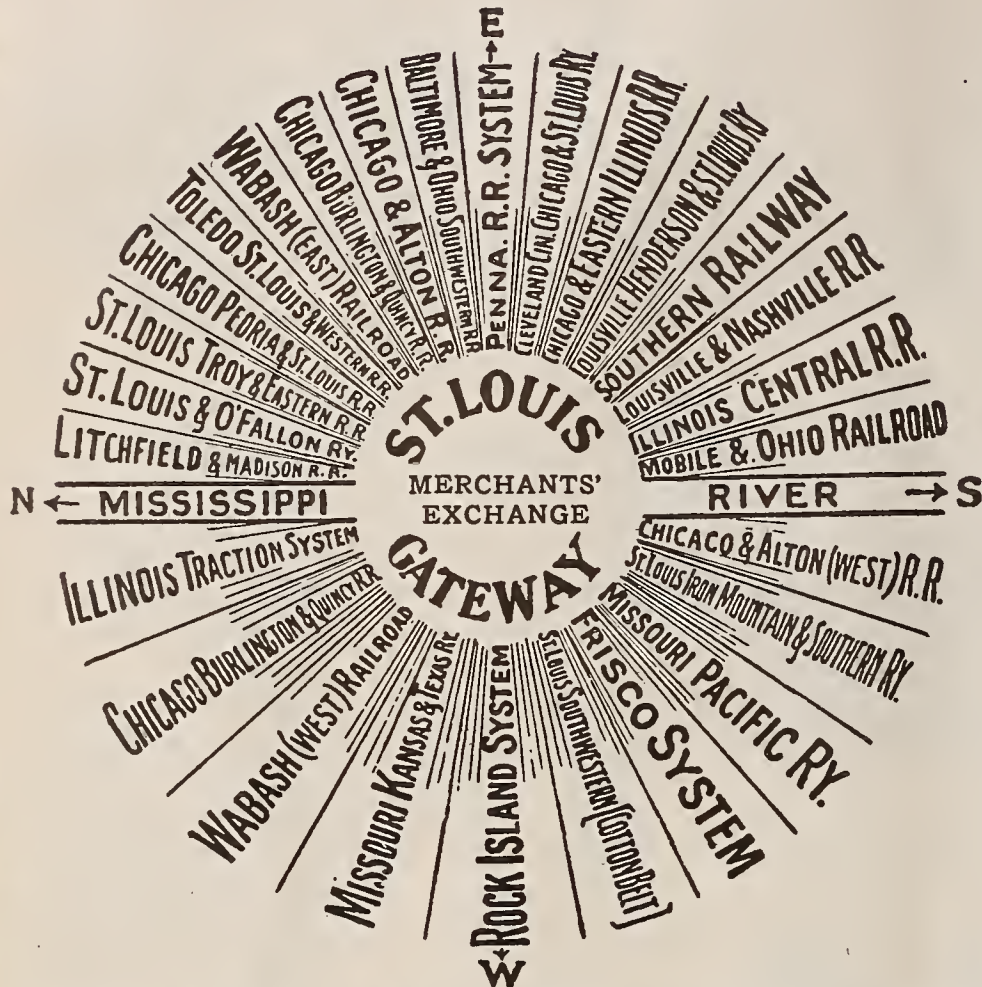
BALTIMORE

BUFFALO

DETROIT

OMAHA

ST. LOUIS, MO.



St. Louis One of the Greatest
Primary Grain Markets in the
United States

More than One Hundred Million
Bushels of Grain Received
Annually

Movement of Grain by Barge
from St. Louis to New Orleans
for Export a Factor in Grain
Trade

*St. Louis Leading Consign-
ment Market in United
States*

Within a radius of 25 Miles—Center of Corn Production.
Within a radius of 250 Miles—Center of Oat Production.
Within a radius of 135 Miles—Center of Farm Area.
Within a radius of 100 Miles—Center of Farm Valuation.
Within 175 Miles—Center of Population, United States.

Nanson Commission Co.

(INCORPORATED)

GRAIN AND HAY

202 Chamber of Commerce

ST. LOUIS

Consignments a
Specialty

Write Us for Full
Information on
St. Louis Markets

Toberman Grain Company

GRAIN, HAY AND SEEDS

A long established house, energetic, enterprising and alert for your interests.

Let us handle your consignments

300 Merchants Exchange

ST. LOUIS, MO.

"THE CONSIGNMENT HOUSE OF ST. LOUIS"

GRAIN, HAY and GRASS SEEDS

Picker & Beardsley Com. Co.

125 MERCHANTS EXCHANGE

Robinson Telegraphic Cipher

Revised Edition

Cloth Binding \$2.00
Leather Binding 2.25

MITCHELL BROTHERS PUBLISHING CO.

431 S. Dearborn Street

Chicago, Ill.

SEO. C. MARTIN, JR. President
FRED C. HOOSE Vice-President
P. C. KNOWLTON Sec'y & Treas.

Martin & Knowlton Grain Co.

Successors to

GOFFE & CARKENER CO.

Suite 516 Merchants Exchange, St. Louis, Mo.

G
RAIN

MARSHALL HALL GRAIN COMPANY

HANDLED ON COMMISSION
BOUGHT TO ARRIVE
SOLD FOR SHIPMENT
EXPORT

ST. LOUIS

For Milling Wheat

Come to St. Louis

Best Grades of Soft Winter and Hard Red
Wheat always available. Millers for years
have found the St. Louis Market most satis-
factory for wheat supplies.

The Winter Wheat Market

**5
Miles
of Webster
Conveyors**



With a receiving capacity of 32 carloads of grain per hour, this great grain elevator at Locust Point, Baltimore, is probably the most modern and fastest grain handling plant in the world.

4,825 sets of Webster Troughing Carriers are in use in this great plant, making a total conveyor length of five miles. 28,000 pounds of grain are carried per minute at a speed of 800 feet per minute.

These Webster Troughing Carriers are of malleable iron with supporting angles of steel. They are simple and rugged and operate with exceptional smoothness.

The field of belt conveyor service is a vast one and requires expert knowledge in selecting the correct application for specific requirements. Webster engineers will gladly confer with you on this subject, without obligation.

THE WEBSTER MFG. COMPANY
4500-4560 Cortland Street
CHICAGO

WEBSTER-BRINKLEY CO.
SEATTLE, WASH.

WEBSTER-INGLIS, LTD.
TORONTO, ONT.

WEBSTER



"Eureka"

-

"Invincible"

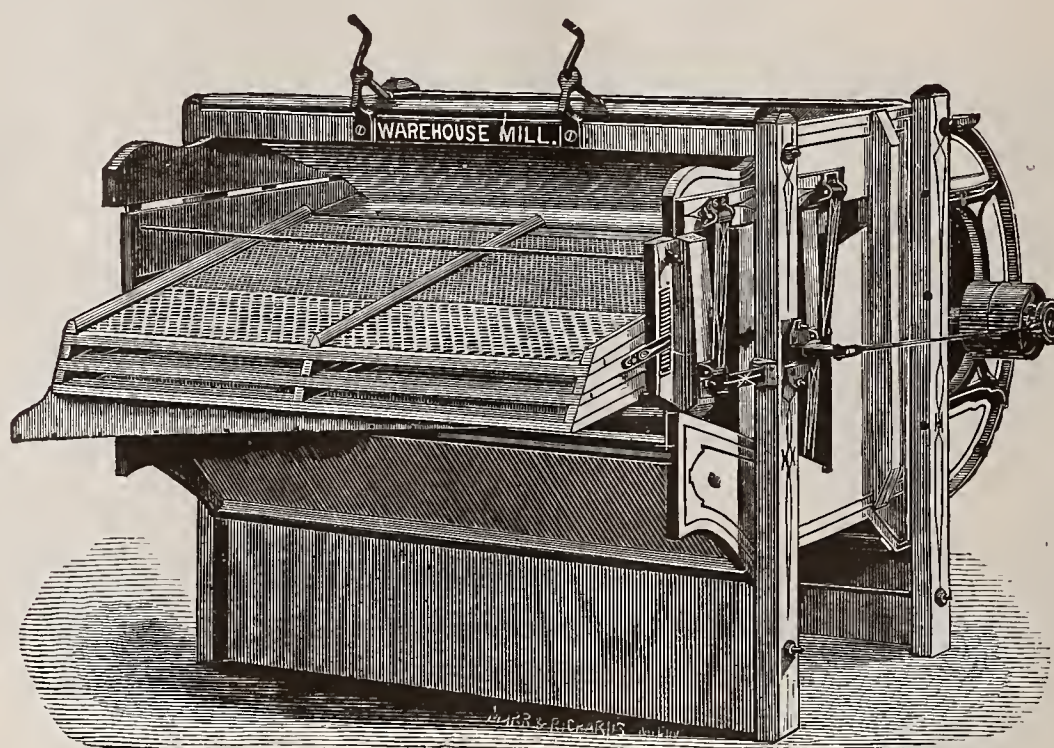
Grain

Cleaning

Machinery



The Johnson & Field No. 3 Warehouse Mill with automatic bagger will make more money for owners of small country elevators. Think of it! A 200 to 300-bushel machine complete to the last detail, for the low price of \$107.



The Johnson & Field Mill will clean any grain or seed

The combination type here shown is a blast and suction machine featuring variable strength air currents and adjustable sieve travel. Costs half as much as a receiving separator and does better work.

REPRESENTATIVES.

Wm. Watson, 10343 So. Campbell Ave., Beverly Hills Manor, Chicago.
J. Q. Smythe, 3142 Bellefontaine St., Indianapolis, Ind.
F. E. Dorsey, 3850 Wabash Ave., Kansas City, Mo.
Bert Eesley, Box 363, Fremont, Ohio.
Dwight Dill, 700 North Winnetka Ave., Dallas, Tex.

Geo. M. Boss, Grand Hotel, New York City.
S. W. Watson, 123 Maplehurst Ave., Syracuse, N. Y.
W. M. Mentz, Sinks Grove, W. Va.
B. M. Estes, 1429 Allston St., Houston, Tex.
Strong-Scott Mfg. Co., 413 So. Third St., Minneapolis, Minn.

S. HOWES CO., Inc.

INVINCIBLE GRAIN CLEANER CO. SILVER CREEK, N.Y.



"EUREKA" - "INVINCIBLE" GRAIN CLEANING MACHINERY



in the New Calumet Elevator



New Calumet Elevator, Minneapolis

Experienced Elevator
Company of Minneapolis
Specify Morse Chains

WHEN the Hallet & Carey Elevator Company of Minneapolis contracted with the McKenzie-Hague Company, Inc., for a new head house and storage to replace that destroyed by fire a year ago, they specified that the power should be by electric motor on each unit and that transmission to all conveyor belts should be by Morse Silent Chain Drive.

Many years of operating experience had taught the company the value of Morse Drives in the interest of efficiency, economy and dependability.

Publication No. 28 shows many applications of Morse Silent Chain Drives in prominent elevators. Write for a copy.

MORSE CHAIN COMPANY ITHACA, N. Y., U. S. A.

ATLANTA, GA.....702 Candler Bldg.,
Earl F. Scott & Co.
BALTIMORE, MD.....1402 Lexington Bldg.
BIRMINGHAM, ALA....Moore-Handley Hdwe. Co.
BOSTON, MASS.....141 Milk St.
BUFFALO, N. Y.....Ellicott Square Building
CHARLOTTE, N. C....404 Commercial Bank Bldg.
CHICAGO, ILL.....112 W. Adams St.
CLEVELAND, OHIO.....421 Engineers Bldg.

DENVER, COLO.....211 Ideal Bldg.
DETROIT, MICH.....7601 Central Ave.
LOUISVILLE, KY.....516 W. Main St.,
E. D. Morton Co.
MINNEAPOLIS, MINN.....413 Third St.
Strong-Scott Mfg. Co.
NEW ORLEANS, LA.....
Queen & Crescent Bldg., 334 Camp St.
A. M. Lockett & Co., Ltd.

NEW YORK, N. Y.....50 Church St.
OMAHA, NEB.....727 W. O. W. Bldg.
D. H. Braymer Equip. Co.
PHILADELPHIA, PA....803 Peoples Bank Bldg.
PITTSBURGH, PA.....Westinghouse Bldg.
SAN FRANCISCO, CALIF.....Monadnock Bldg.
ST. LOUIS, MO....2137 Railway Exchange Bldg.
TORONTO, 2, ONT., CAN...50 Front Street, E.
Strong Scott Mfg. Co.
WINNIPEG, MAN., CAN.....Dufferin St.
Strong Scott Mfg. Co.



NEW YORK PRODUCE EXCHANGE

GRAIN FUTURES MARKET

DOMESTIC AND BONDED CONTRACTS

BUFFALO DELIVERY

The Domestic Contract is for desirable milling wheat and includes:

- No. 1 Hard Spring Wheat—at 2 cents per bu. over contract price.
- No. 1 Dark Hard Winter Wheat—at $1\frac{1}{2}$ cents per bu. over contract price.
- No. 1 Dark Northern Spring Wheat—at 1 cent per bu. over contract price.
- No. 2 Dark Hard Winter Wheat—at $\frac{1}{2}$ cent per bu. over contract price.
- No. 1 Hard Winter Wheat—at contract price.
- No. 2 Hard Winter Wheat—at contract price.
- No. 1 Red Winter Wheat—at contract price.
- No. 2 Red Winter Wheat—at contract price.
- No. 1 Northern Spring Wheat—at contract price.
- No. 2 Dark Northern Spring Wheat—at 2 cents per bu.—under contract price.
- No. 2 Northern Spring Wheat—at 5 cents per bu.—under contract price.

The Bonded Contract is for Canadian Wheat Dominion inspection and includes:

- Manitoba No. 1 Hard Wheat—at contract price.
- Manitoba No. 1 Northern Wheat—at contract price.
- Manitoba No. 2 Northern Wheat—at 3 cents per bu. under contract price.
- Manitoba No. 3 Northern Wheat—at 8 cents per bu. under contract price.
- Manitoba No. 4 Wheat at 20 cents per bu. under contract price.

Contracts in both domestic and bonded wheats are for five thousand bushels with smaller amounts traded in.

The minimum commission for non-members is $\frac{1}{4}$ c. per bu. for the round turn.

Contracts are cleared through a strongly organized clearing house with original margins and margins to the market.

These are Indemnities for both contracts.

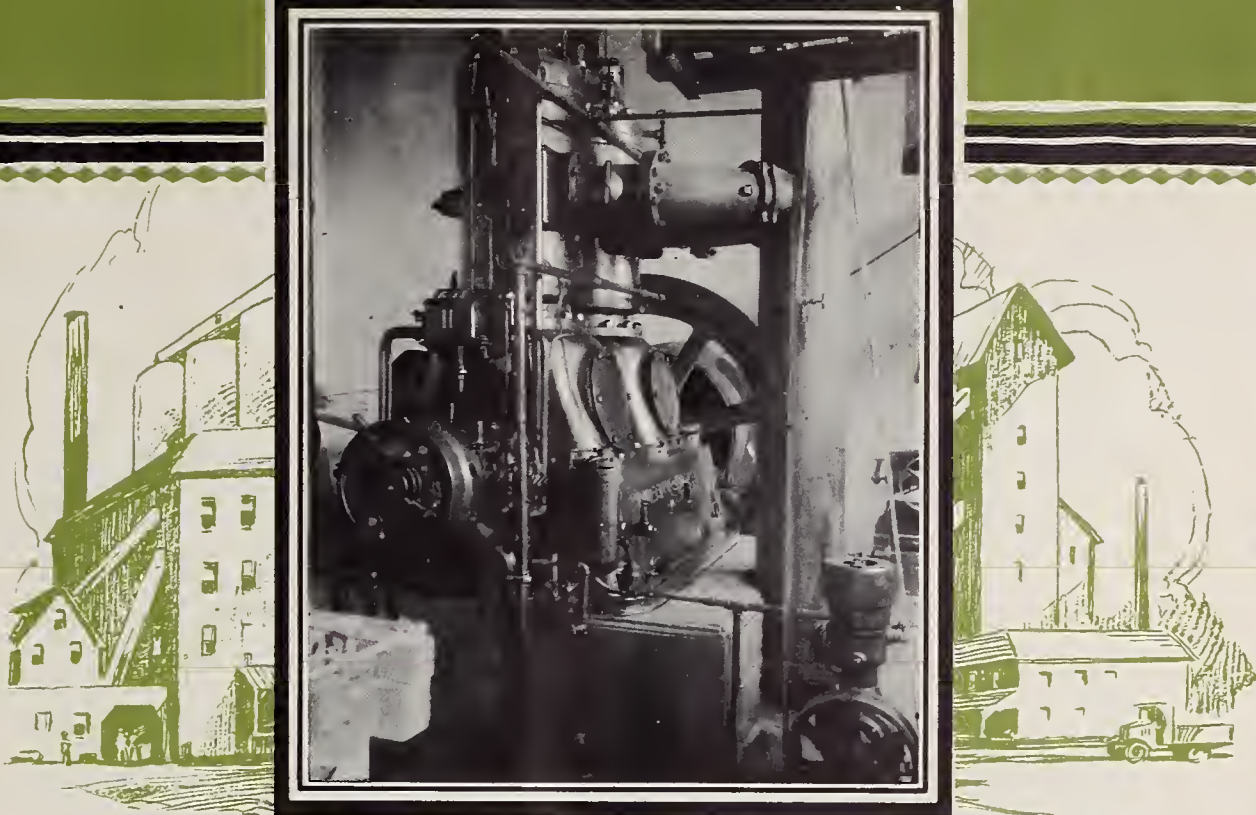
Delivery is at Buffalo in regular warehouses appointed by the Board of Managers of the New York Produce Exchange. Elevators are under bonds and all contract grain is under the supervision of the New York Produce Exchange inspectors.

Rules will be sent on request to the Secretary of the Exchange.

*Guarantees
Service*



*Guarantees
Safety*



Fairbanks-Morse Engine operated by Harlan City Roller Mills

Paid for itself in two years —then paid dividends

Facts are their own argument—and one demonstrated fact is the superiority of the Fairbanks-Morse Diesel for mill or elevator power. The proofs are all around you—records of drastic power cuts in plants like yours. Here is a typical instance of it:

For more than 18 years the Harlan City (Iowa) Roller Mills had been using a steam plant which ranked as a highly efficient plant of its kind. Seven years ago this mill installed a 75-hp. F-M Diesel. In commenting on this engine, L. H. Rasmussen of the Harlan City Roller Mills said:

"Fairbanks-Morse & Co. put up such a strong guarantee that we signed a contract for one of their engines and in due time the new engine was installed. It started up without a hitch and we have kept it running every day and part time at night up until about August 1, 1925, when we sold this 75-horsepower engine and put in one of the 100-horsepower Type 'Y' engines, having reached a point where we were overloading the smaller engine.

"We have been milling in different parts

of the country for the last 40 years. We have used water, steam and electric power, but we have never in all these years found any power that is as economical for operating as an oil engine. It gives us steady and even power from morning till night or until the oil is shut off. There is no fire to bank, no coal to handle, nor ashes to wheel out.

"As near as we can estimate, it takes about three-quarters of a gallon of lubricating oil at about 64 cents per gallon for 11 hours run, and the fuel oil runs from 5 cents to 6 cents per gallon, f.o.b. Harlan. It takes from about 45 to 50 gallons a day with full load to grind flour and feed. We would figure it costs us about 5 cents to make a barrel of flour.

"We can't understand why so many small mill plants want to fool around with an old style steam plant or other expensive power when they can go ahead and buy an oil engine that will cut their power expenses down to almost nothing."

The modern handwriting is on the wall. The F-M Diesel is coming your way. Ask for records of typical F-M equipped plants.

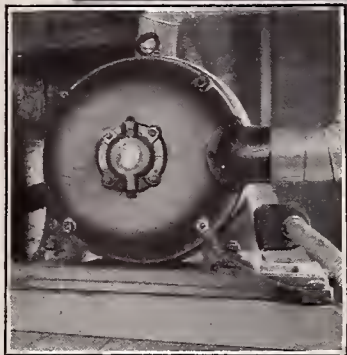
FAIRBANKS-MORSE

DIESEL ENGINES · PUMPS · MOTORS





Elevator and mill of Russell Miller Milling Co., Grand Forks, N. D. The elevator is equipped with seven F-M Enclosed Ventilated Motors. There are also one Fairbanks 100-ton Type "S" track scale and one 10-ton dump scale installed in this elevator



One of the Type "EH" Enclosed Ventilated Motors in the elevator illustrated above

Underwriters' approved

The Fairbanks-Morse Enclosed Ventilated Ball-Bearing Motor is the result of exhaustive studies of elevator and flour mill requirements.

Electrical elements are completely enclosed by a strong cast-iron shell. Any possible sparks from either mechanical or electrical sources are confined within the motor. Fire and explosion hazards are eliminated.

Although completely enclosed, this type of motor runs cool as a result of carefully planned ventilation in which clean air, drawn from out of doors, is circulated throughout the interior.

Like all F-M Ball-Bearing Motors the enclosed ventilated type requires lubricating only once a year and this is practically the only attention ever needed. This motor is recommended by the Mutual Fire Prevention Bureau for use in mills and elevators for minimum insurance rates.

Mail the coupon for descriptive bulletin

FAIRBANKS, MORSE & CO., Chicago
28 branches throughout the United States at your service

FAIRBANKS-MORSE

MOTORS · DIESEL ENGINES · PUMPS

A816-A(E0)A22.1



FAIRBANKS, MORSE & CO.
900 South Wabash Avenue, Chicago
Please send bulletins covering the following items:
☐ Enclosed Ventilated Motors
☐ Diesel Engines
☐ Pumps
☐ Fairbanks Scales

Name _____
Address _____
Company _____



Manchester Ship Canal Elevator
Manchester, England
Capacity 1,500,000 Bushels
Completed 1914



Buenos Aires Elevator Co.
Buenos Aires, Argentina
Capacity 750,000 Bushels
Completed 1920



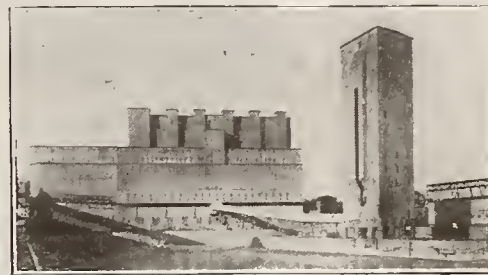
John S. Metcalf Co. Grain Elevator Engineers



Chicago & North Western Railway Elevator
South Chicago, Illinois
Capacity 10,000,000 Bushels
Completed 1920

OFFICES:

Chicago, Illinois, - - - 111 W. Jackson Blvd.
Montreal, Canada, - 54 St. Francois Xavier Street
Melbourne, Australia, - - 395 Collins Street
Vancouver, B. C., - - - 837 W. Hastings St.



Harbour Commissioners Elevator No. 2
Montreal, Quebec
Capacity 2,600,000 Bushels
Completed 1912



Sydney Terminal Elevator
Sydney, Australia
Capacity 6,400,000 Bushels
Completed 1921



MONARCH

Built Elevators
Assure You
Economical Design
First Class Work
Efficient Operation
and
Satisfaction
Let Us Submit
Designs and Prices

One of the Modern Houses Which Has Made a Record
for Rapid and Economical Handling
CONCRETE CENTRAL, BUFFALO, 4,500,000 Bu.



MONARCH ENGINEERING CO.

BUFFALO, N. Y.



The Barnett & Record Company

GENERAL CONTRACTORS

Designers and Builders of

Grain Elevators, Flour Mills and Heavy Structures

Reinforced Concrete and Steel Ore Dock constructed at Superior, Wisconsin, for the Allouez Bay Dock Company. Entirely Fireproof.

Write for Designs and Estimates

OFFICES:

Minneapolis, Minn.

Duluth, Minn.

Fort William, Ontario

MACDONALD ENGINEERING COMPANY

CONSTRUCTING ENGINEERS

Designers and Builders of

**GRAIN ELEVATORS, FLOUR
MILLS, WAREHOUSES, ETC.**

We Have Specialized in

**CONSTRUCTION IN THIS FIELD FOR
MORE THAN 40 YEARS**

Sketches and Estimates Gladly Furnished

MAIN OFFICE

53 West Jackson Boulevard, Chicago

BALTIMORE KANSAS CITY SAN FRANCISCO TORONTO

Missouri Pacific Railroad Co.

**2,500,000 Bu. Concrete Grain Elevator
ST. LOUIS, MO.**



Designed and Built by

FOLWELL-AHLSSKOG CO.

ENGINEERS AND CONSTRUCTORS

323 No. Michigan Ave.

Chicago, Ill.



in
**St. Louis
stop
at the
HOTEL
JEFFERSON**

[12th & Locust Sts.]

**Located
in the Heart of the
Business and
Theatrical Districts**

RATES

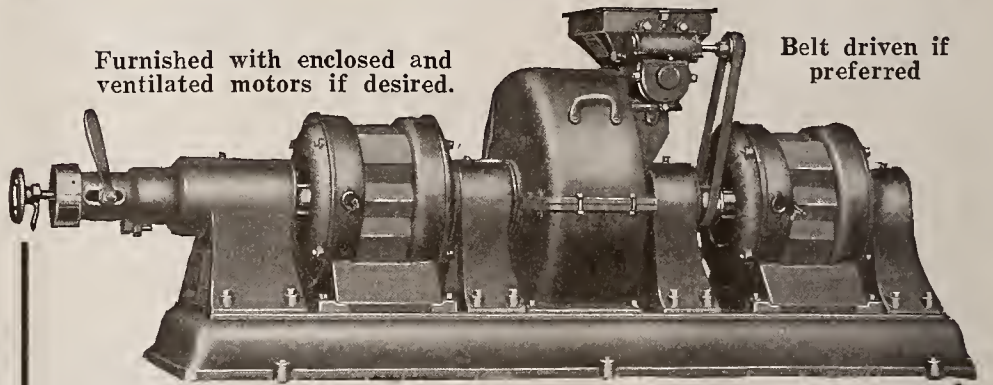
**Single \$2.50 Per Day and Up
Double \$4.00 Per Day and Up**

Garage Opposite Hotel

**LYMAN T. HAY
PRESIDENT**

*Furnished with enclosed and
ventilated motors if desired.*

*Belt driven if
preferred*



Build Up a Profitable Side Line

Before competition forces you to install a feed grinder to hold your present trade, why not develop the side line of feed grinding and draw new customers to your elevator?

The MONARCH Ball Bearing Attrition Mill

is a sturdy, dependable feed grinder that has for more than 16 years demonstrated consistently that it will grind all kinds of grain uniformly with a minimum amount of power and upkeep expense and stay in service longer than any other type of machine. We have an interesting booklet of attrition mill facts for you. Will you write for it now?—just ask for booklet "B" 10.

SPROUT, WALDRON & CO.

1203 Sherman St., Muncy, Pa.

Chicago Office
9 S. Clinton St.

Kansas City Office
612 New England Bldg.

San Francisco Office
726 Harrison St.



JONES-HETTELSATER CONSTRUCTION CO.

Designers and Builders

**MILL BUILDINGS :: ELEVATORS
FEED PLANTS**

708-9 Mutual Building, Kansas City, Mo.

Reliance Construction Company

**Furnish Plans, Estimates and Build
COUNTRY GRAIN ELEVATORS**

Our long experience as a builder of elevators insures you an up-to-date house. Write today.

Board of Trade Building,

INDIANAPOLIS, IND.

Burrell Engineering & Construction Co.

**Designers of Grain Elevators, Flour
Mills and Associated Buildings**

513 West Jackson Boulevard

Chicago, Ill.

ARE YOU WORRIED

about the condition of that grain in your bins?

Let us equip your storage with a

Zeleny Thermometer System

to tell you the exact condition of
the grain and cut out the worry

Over 150 Elevators Equipped

Write for Description

ZELENY THERMOMETER COMPANY

542 South Dearborn Street

Chicago

JAMES STEWART & COMPANY, Inc.

1210 Fisher Bldg.
Chicago, Ill.

**Designers and Builders
Grain Elevators**

**W. R. SINKS
Manager**

In all parts of the world

Every day in every way we are designing and building better and better Grain Elevators.

We have built for many of your friends—Eventually we will build for you. Why not now?

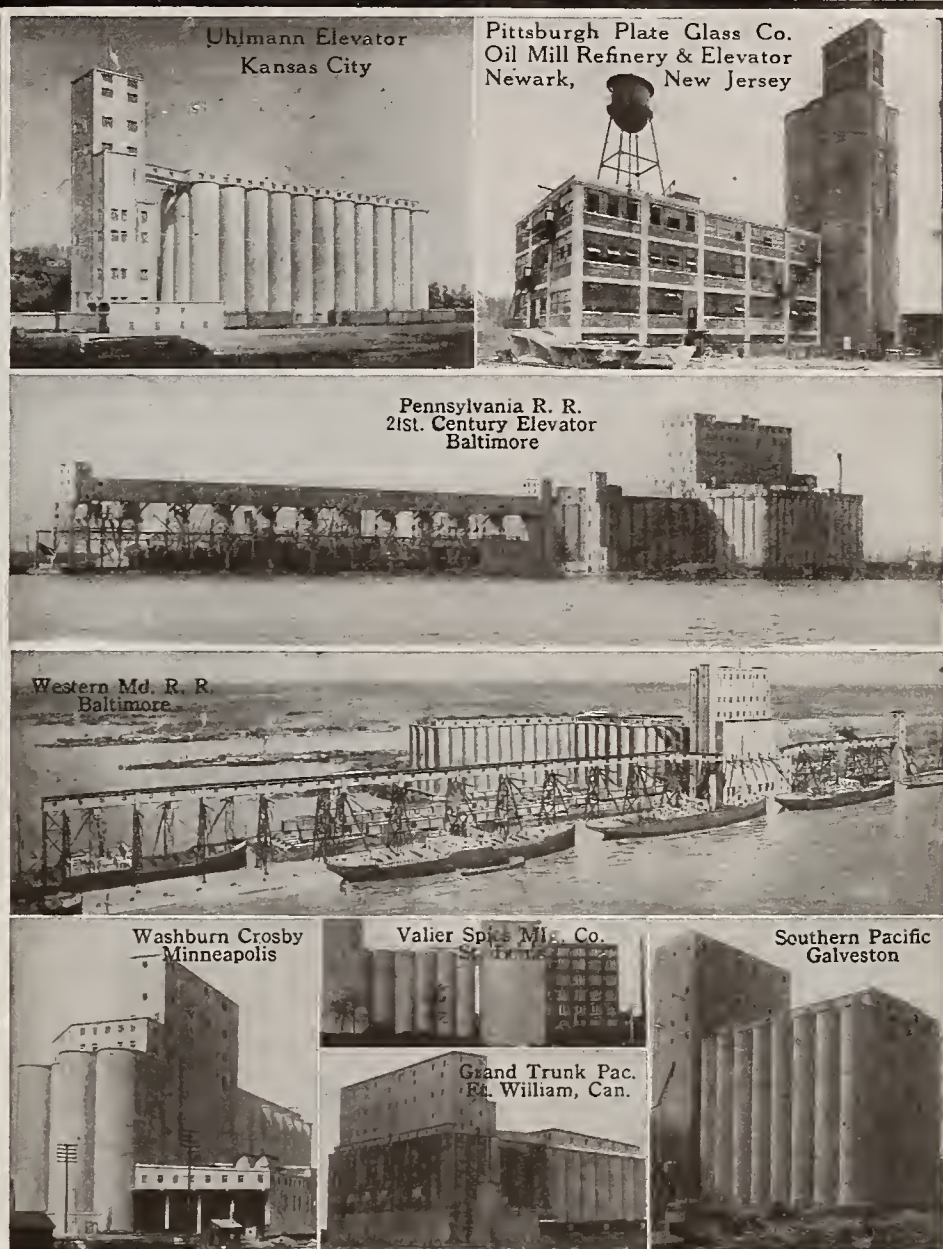
L. A. STINSON CO.

Engineers and General Contractors

**ELEVATORS, MILLS AND WAREHOUSES
COMPLETE**

332 So. La Salle Street Chicago, Ill.

General Overhauling and Improvements



2,500,000-Bushel Terminal Grain Elevator

Designed for

The Philadelphia Grain Elevator Company

PORT RICHMOND

PHILADELPHIA

PENNSYLVANIA

BY

**FEGLES CONSTRUCTION
COMPANY, Ltd.**

Engineers

Contractors

**MINNEAPOLIS, MINN.
FORT WILLIAM, ONT.**



Baltimore & Ohio
Terminal Grain Elevator
Baltimore, Md.

Constructed by

THE **M. A. Long** CO.

The Long Building
10 W. Chase St.

Baltimore, Md.

Engineers and Constructors
Grain Elevator Department



*The Most Efficient Grain Handling
Plant in the World*

Capacity 3,800,000 Bushels

Humphrey Elevator

Install "It"—
Then Depend On "It"!

The Humphrey Employees' Elevator

is so strongly constructed and so mechanically perfect that its continual faithful service becomes a matter of course.

Its simple Worm Gear Drive minimizes the number of moving parts, thus practically eliminating maintenance expense or costly "Out-of-Order" periods.

There Is Only One Genuine Humphrey Elevator.
Write for interesting details about it.

Humphrey Elevator Co.

816 Division Street,

Faribault, Minn.

BACON & TISLOW

DESIGNERS OF GRAIN ELEVATORS,
FLOUR MILLS, ETC.

31 W. Ohio Street

Indianapolis

WALLS, BINS and GRAIN ELEVATORS

By MILO S. KETCHUM

Second Edition. 556 pp., \$5.00

Design and construction are covered completely in this book. The new edition brings it up to the minute with fresh data, new cuts, and a modern treatment throughout. Over 150 pages were added to the old edition. The new chapters on "Reinforced Concrete" and "Methods of Construction and Cost of Retaining Walls" are especially valuable. It is the standard work on stresses due to granular materials.

MITCHELL BROS. PUBLISHING CO., 431 So. Dearborn St., Chicago, Ill.



CAPACITY 800,000 BUSHELS

THOSE CONCERNED

Or even casually interested in concrete grain storages notice and usually comment on the accurate alignment, smooth walls, and clean cut appearance of

POLK SYSTEM BINS

We Design and Erect

Send us your inquiries.

POLK GENUNG POLK CO.

FORT BRANCH

INDIANA

ENCLOSED VENTILATED ELECTRIC MOTORS

Are specially adapted to Flour Mill and Grain Elevator purposes.

No burnouts or breakdowns from dust clogged windings!

No daily job of blowing dust out of the motor!

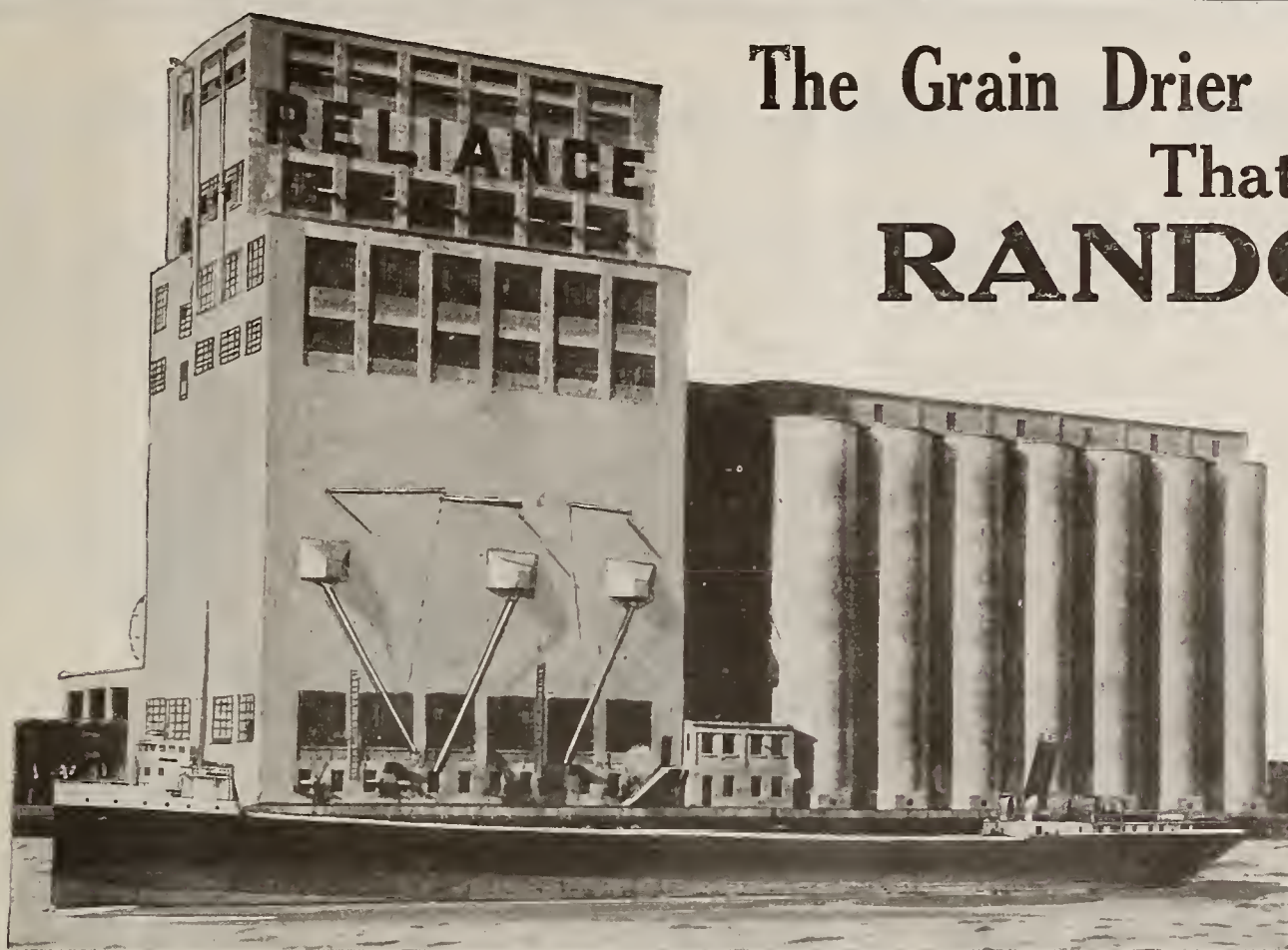
NO FIRES From Burnouts.

ATTRITION MILLS ARE NOW BUILT
WITH DIRECT CONNECTED EN-
CLOSED VENTILATED MOTORS.

Mutual Fire Prevention Bureau

230 East Ohio Street
Chicago, Illinois

Representing the MILL MUTUAL FIRE INSURANCE COMPANIES



Reliance Terminal Elevator of Port Arthur, Ontario, Canada
(Office at Fort William, Ont.)

The Grain Drier Without a Boiler That's a RANDOLPH!

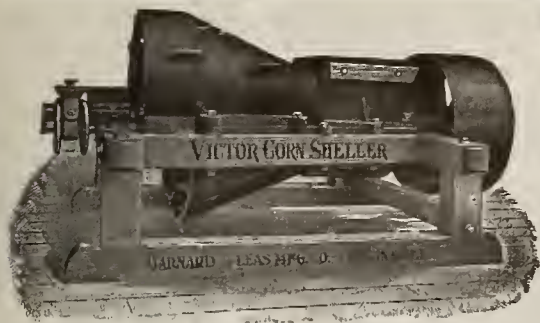
For every pound of coke consumed in a Randolph Direct Heat Furnace the Reliance Terminal Elevator at Port Arthur, Ontario, dry 2 1/3 bushels of wheat from 16% moisture down to 12%, wheat graded No. 1 and No. 2 after passing thru drier.

Outside temperature (March, 1926) varied from a few degrees above to 10 degrees below zero.

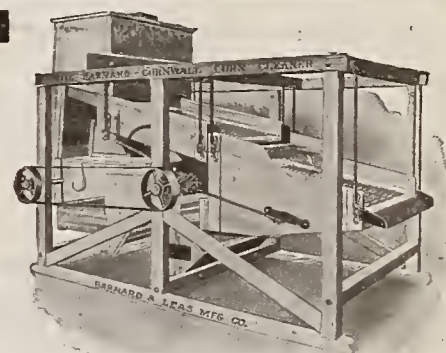
This is the drier that begins where the steam drier leaves off.

Manufactured by

O. W. RANDOLPH COMPANY
TOLEDO, OHIO, U. S. A.



BARNARD-MOLINE EQUIPMENT FOR GRAIN ELEVATORS, FEED PLANTS AND CORN MILLS



A FEW SUGGESTIONS

Corn Shellers
Corn Cleaners
Combined Corn Shellers and Cleaners
Dust Collectors
Ear Corn Crushers
Employees Belt or Service Elevator
Fans
Feeders
Feed Packers
Feed Screens
Manlifts
Mills, Roller Feed
Separators, Grain
Separators, Magnetic
Scourers

Belting, all kinds
Belt Supplies
Belt Conveyors
Car Pullers
Distributing Spouts
Dumps, Wagon and Truck
Elevator Heads, Boots and Legging,
both Wood and Steel
Hopper Bottoms
Loading Spouts
Perforated Metal
Power Grain Shovels
Scales, all types
Spiral Steel Conveyor
Turn Heads

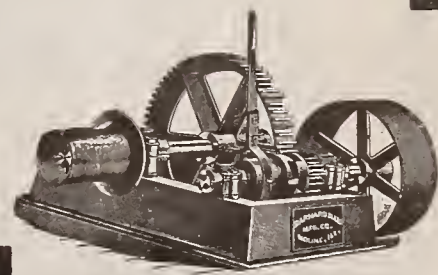
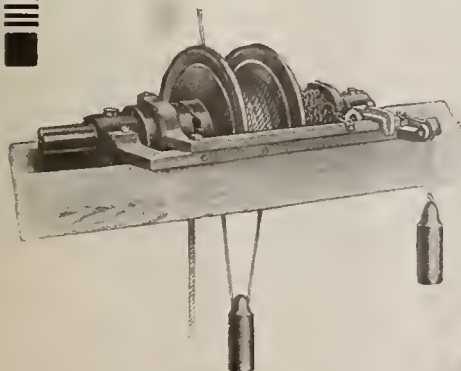
Clutches
Collars, safety set
Couplings, all types
Drop Hangers
Gears, all types
Idlers
Pillow Blocks
Post Hangers
Pulleys, Cast Iron
Pulleys, Wood Split
Rope Transmission Equipment
Shafting
Sprocket Chain
Sprocket Wheels
Tighteners

*If we can serve you by supplying catalogue, bulletins,
engineering information or prices, let us hear from you.*

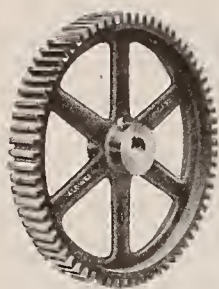
BARNARD & LEAS MFG. CO.

MOLINE, ILL., U. S. A.

Established 1860



Caldwell Gear for Long, Reliable Service



Gears—spur, bevel, miter, angle and worm—all types and sizes. We carry the largest number of gear patterns in the country. Caldwell furnishes machine-molded, cut tooth and pattern molded gears. They are all built to last.

If you need elevating, conveying or transmission machinery promptly, address Caldwell, or nearest Link-Belt Company office.

Caldwell Products

Car Spotters, Bearings,
Shafting, Pulleys, Gears,
Chains, Wheels, Helicoid
Conveyors and Accessories,
Belt Conveyors, Chain Con-
veyors, Elevator Buckets,
Boots and Casings, Etc.

H. W. CALDWELL & SON CO.

LINK-BELT COMPANY, OWNER

DALLAS, TEXAS, 810 Main St.

Chicago: 1700 S. Western Ave.

NEW YORK: 2676 Woolworth Bldg.



WALLS, BINS AND GRAIN ELEVATORS

By MILO S. KETCHUM

Design and construction are covered completely in this book of 556 pages. The new second edition brings it up to the minute with fresh data, new cuts, and a modern treatment throughout. Over 150 pages were added to the old edition. The new chapters on "Reinforced Concrete" and "Methods of Construction and Cost of Retaining Walls" are especially valuable. It is the standard work on stresses due to granular materials.

PRICE \$5.00 POSTPAID

MITCHELL BROS. PUBLISHING COMPANY

431 S. DEARBORN STREET
CHICAGO, ILL.

When in CHICAGO

Enjoy your stay—at the superb new

MORRISON HOTEL

The Tallest Hotel in the World
Forty-six Stories High

Closest in the City to Offices, Theatres,
Stores and Railroad Stations

Home of the Boston Oyster House

1944 Rooms, Each with Bath

Lowest Rates

ALL rooms are outside, each with bath, running ice water, bed-head lamp, and Servidor. A housekeeper is stationed on each floor. All guests enjoy garage service. The famous Terrace Garden entertainments are broadcast daily from WSWS.

Write or wire for reservations



The New Morrison, when completed, will be the world's largest and tallest hotel, 46 stories high, with 3,400 rooms.

PUT THAT DIFFICULT JOB UP TO "EHRSAM"



FROM 1872—over 50 years ago, "Ehrsam" has been producing and improving Grain Handling and Milling Equipment of all kinds. And during these years many problems have been met and overcome by "Ehrsam" Engineers.

EHRSAM Grain Handling and Milling Equipment

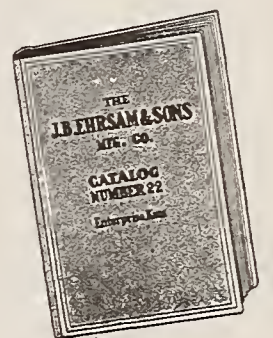
This long specialization and experience places us in an enviable position to give you just the right equipment for your particular needs. It is, therefore, wise econ-

omy to consult "Ehrsam" on all equipment matters. We ask that you write us today.

FREE CATALOG

J. B. EHRSAM & SONS MFG. CO.
ENTERPRISE, KANSAS

Manufacturers of Machinery for Flour Mills; Grain Elevators; Cement Plaster Mills; Salt Plants; Coal Handling and Rock Crushing Systems; Fertilizer Factories; Power Transmission, Elevating and Conveying Equipment



The Big 400-page "Ehrsam" Catalog will be sent to anyone interested upon request.

HESS PNEUMATIC GRAIN DRIERS

Used everywhere.

NONE BETTER

For twenty-five years this drier has led all others in efficiency, economy and convenience. Made in various sizes, suitable for all grain drying needs. Tell us your wants.

Hess Warming & Ventilating Co.

1210 So. Western Ave., Chicago

REPAIR NOW FOR HARVEST BUSINESS

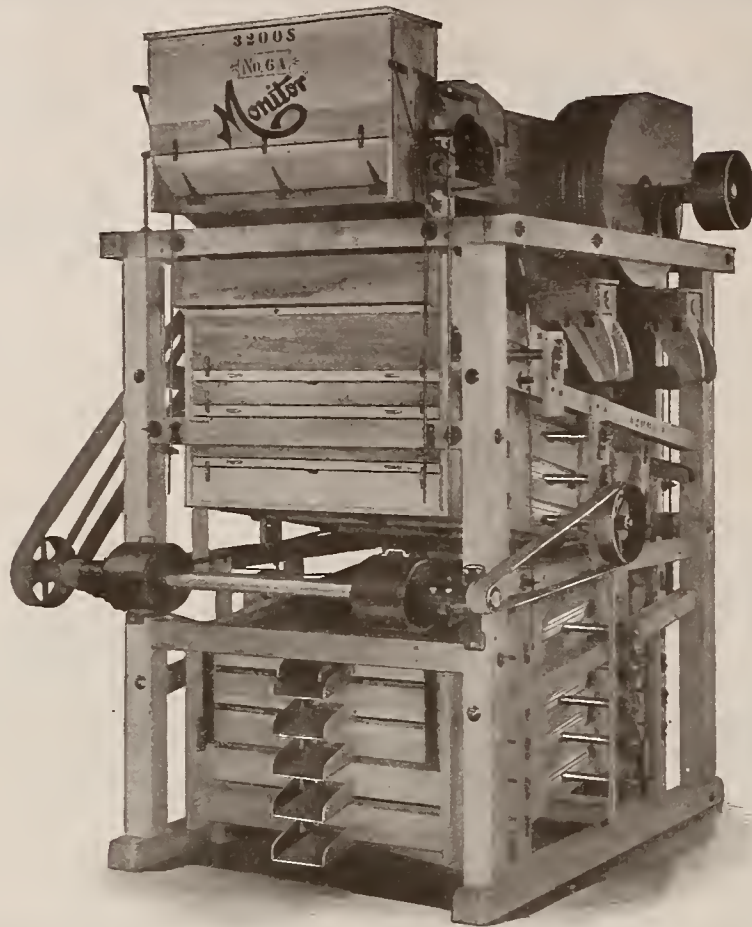
WE CAN FURNISH ANYTHING YOU
NEED TO PUT YOUR PLANT IN
FIRST CLASS CONDITION

WESTERN

**Grain Elevator Machinery
Shellers and Cleaners**



UNION IRON WORKS, DECATUR, ILL.



A NEVER ENDING PROFIT

exists in Screenings, to be had by those who equip to get it.

There is without doubt, valuable wheat, oats, flax, mustard, etc. passing out of your plant daily, concealed in your screenings.

A MONITOR Screenings Separator, installed in the plant, will get all of these, each by itself. And you know that each of these will command a wonderful premium over the worth of plain screenings.

If you doubt that they are there, send us a quart sample and we will separate and return, telling you the percentages. Then at least, you will know what you are losing.

HUNTLEY MFG. CO.

Department E
SILVER CREEK, N. Y.

[*Eventually at*
[*Brocton, N. Y.*]

OUR REPRESENTATIVES, AT YOUR SERVICE

CHICAGO
A. D. McPherson, 410 Webster Bldg.

MINNEAPOLIS
A. F. Shuler, 218 Iron Exchange

KANSAS CITY
F. J. Murphy, 732 Board of Trade

ROCHESTER, N. Y.
B. L. Brooks, Powers Hotel

CANADIAN PLANT
Tillsonburg, Ontario

VANCOUVER, B. C.
Will Hill, 615 Credit Fancier Bldg.

J. J. Ross Mill Furnishing Co.
Portland, Ore. - Seattle, Wash.

LOS ANGELES, CALIF.
McKain Mfg. Co.

DAYTON, OHIO
W. B. Sutton, 337 W. Hudson Ave.

PHILADELPHIA, PA.
C. Wilkinson, 6317 Lebanon Ave.

HIGH POINT, N. C.
C. T. Burton, 103 Woodberry St.

SAN FRANCISCO
John R. Gray, Inc., 726 Harrison St.

A monthly journal devoted to the elevator and grain interests.

Official paper of the Grain Dealers' National Association and of the Illinois Grain Dealers' Association.

Established in 1882.



Published on the fifteenth of each month by Mitchell Bros. Publishing Co., 431 So. Dearborn St., Chicago, Ill.

Subscription price, \$1.00 per year. English and Foreign subscription, \$1.75 per year.

Established in 1882.

VOL. XLV

CHICAGO, ILL., SEPTEMBER 15, 1926

NO. 3

Calumet Elevator Adds to Minneapolis Capacity

New Concrete Elevator, to be Operated by Hallet & Carey Elevator Company, Provides 800,000 Bushels of Storage

THE completion of the new Calumet Elevator at Minneapolis, Minn., signalizes the entry into the grain trade of a new elevator operating concern, the Hallet & Carey Elevator Company, 114 Chamber of Commerce Building, Minneapolis, although the principals in the firm have been in the grain commission business for years. And at the same time the elevator is representative of the work of a new construction concern, the McKenzie-Hague Company of the same city. The new house is thoroughly modern in every way and embodies some of the most advanced ideas in engineering and cleaning.

It is built of concrete and steel chiefly, and has direct connection with the Chicago & Northwestern Railway yards. The headhouse measures 52 feet in length and 35 feet in width. The building has a height of 165 feet. As will be seen from a glance at the illustration on this page, made from a photograph of the new structure, it presents a trim appearance indicative of an efficient and compact storage plant.

The Hallet & Carey Company of Minneapolis, for some 25 years past, has been doing a general grain merchandising business out of Minneapolis, Minn., with an office in Duluth, and they are also interested in the Hallet-Carey-Swart, Ltd., of Winnipeg, Man. This company has been engaged in all branches of the grain business, and, therefore, felt the need of elevator connections in the Minneapolis market. It was for this reason that the new company, Hallet & Carey Elevator Company, a Delaware corporation, was organized, and it is the new company which has built the Calumet Elevator. Frank L. Carey, former president of the Chicago Board of Trade and president of the Nye-Jenks Grain Company, of Chicago and Kansas City, is the president of the Hallet & Carey Elevator Company of Minneapolis. F. A. Hallet, president of the Hallet & Carey Company of Minneapolis, and vice-president of the Hallet-Carey-Swart, Ltd., of Winnipeg, is vice-president of the new corporation.

Thirty-four units of storage are provided in the Calumet Elevator, and these can handle a capacity of 800,000 bushels of grain. These units are ar-

ranged in line tanks so that interspace bins are provided. The house is equipped with two receiving legs and they have a capacity adequate for handling from 40 to 50 cars of grain per day. The shipping capacity ranges between 60 and 70 cars per day.

Seven machines have been provided for cleaning purposes, and 5,000 bushels per hour is the clean-

ago. It was constructed to incorporate the use of approximately 400,000 bushels of storage which was of fireproof construction and remained standing after the fire. The new plant has been arranged to provide six large cylindrical tanks, which are 26 feet in inside diameter, spread so that they provide 14 smaller bins or interspaces. The new workhouse, which, as has been said, is 165 feet high, is furnished with two receiving pits, one on each side of the plant.

The two 12,000-bushel receiving legs discharge into two 2,500-bushel garners over two 2,000-bushel hopper scales. There is also a three compartment leg for elevating the three separations as discharged from a five-reel cylinder machine located on the first floor. Midway between the first floor and the bin floor is located a cleaner floor which has bins above and bins below to accommodate future installation of grain cleaners. At the top of the bins on the bin floor is a Monitor Flax Cleaner and a Monitor Oat Clipper, made by the Huntley Manufacturing Company. In the top of the workhouse, directly under the top floor and on the same level as the scale garners, are situated five bins which receive direct from the compartment leg and these are so arranged as to discharge to the oat clipper and the flax machine or through a by-path spout and a telescope spout to a group of main bins or onto storage belts.

The general spouting system from scales consists of two large telescoping spouts arranged in such a way as to reach the bins in the workhouse or to discharge onto storage belts. The storage is provided with one belt in the basement returning grain to the workhouse and two belts for conveying grain from the workhouse to the storage.

Each operating unit is provided with its individual drive. The elevator legs and belts are operated by double wound motors with direct connection through helical gear sets

on legs and Morse Silent Chain Drives on the belts.

Electricity is used throughout, both for power and lighting, as well as heating. The elevator has its own transformer station. There are 16 electric motors, having an aggregate of 400 horsepower.

For unloading, Clark Automatic Power Shovels



NEW CALUMET ELEVATOR AT MINNEAPOLIS, MINN.

ing capacity. Pank grain door openers, made by the Strong-Scott Manufacturing Company of Minneapolis, have been installed, and the plant has a complete dust collecting system.

The new plant was constructed on the site of the old Calumet Elevator, which burned over a year

are used. The Zeleny Thermometer System has been provided.

The cleaners are operated by using texrope transmission drives. The oat clipper is direct connected to the motor by means of a flexible coupling. A two-drum car puller having a capacity of 18 cars at one time has been installed in the basement of the workhouse. This car-puller will haul cars on either side of the receiving or shipping tracks.

A complete dust collecting system with connections to all cleaning machine collectors and with connections to belt loaders and floor sweeps is in the workhouse. The scales are Fairbanks-Morse latest improved Type "S"—solid, level, pedestal scales with automatic recording devices and weight lifting mechanism. Belts were furnished by the Manhattan Rubber Manufacturing Company. Conveyor and leg machinery was furnished chiefly by the Weller Manufacturing Company, of Chicago. A freight elevator serving all floors from the first to top floors has also been provided.

The new elevator was built by the McKenzie-Hague Company of Minneapolis, a new corporation in the construction field, which was organized under the laws of the State of Delaware in November, 1925. The members of the firm include I. R. McKenzie, president; Mr. Hague, and F. W. Bennison. Mr. McKenzie has been associated with elevator constructors as field superintendent and builder for about six years, and Mr. Hague has been associated with elevator constructors in Chicago and Minneapolis during the last 15 years. Mr. Bennison, who is acting as secretary and treasurer of the new concern, is in charge of costs, accounting and the office part of the business.

WORLD POOLERS TO MEET

Kansas City is the place, and March 16 is the time set for submitting further plans for a world-wide wheat pool to the Second International Wheat Pool Conference. In addition to delegates from Canada and the United States, delegates from Australia, Argentina, Russia and India are expected.

Among the principal matters to be dealt with at the conference will be the formulation of a system which will produce a more efficient and accurate basis for handling and selling wheat and the organization of a new service to give more dependable information relative to crop conditions throughout the world.

Subjects selected for discussion include pool education, field service elevators, the possibility of getting a better price for wheat, membership campaigns, contract renewals and organization generally.

MORE ABOUT MILL STOCKS

The following communication has been forwarded to this office. The content is self explanatory. H. S. Irwin, specialist in the Grain, Hay, and Feed Market News Service of the United States Department of Agriculture, is the writer. He says:

"In your issue of August 15, on Page 36, is noticed an editorial 'About Those Mill Stocks'. It compares the mill and elevator stocks of 22,980,000 bushels, evidently mill and elevator stocks reported by the Department of Agriculture, with the Millers National Federation report of 53,477,648 bushels. May we suggest that these figures are not comparable and are not intended for the same purpose.

"Reports on stocks in mills and elevators have been issued by the Department of Agriculture beginning with 1919. These reports, however, have only included country elevators and certain of the smaller mills and have not been intended to cover the holdings of the larger mills. Beginning with June 30, 1925, the Bureau of the Census has been reporting stocks in merchant mills. This report supplements the reports of the Department of Agriculture upon wheat in other positions and, together with wheat in transit and in terminal stocks, gives a fairly complete statement of the old wheat supply of the country on July 1.

"The Department of Agriculture reports of wheat in farmers' hands and in mills and elevators were

available early in July and the figure of 60,205,000 bushels which you quoted was prepared as comparable with the same figures for previous years, although it was recognized that this figure took no account of the stocks in the large mills. The census report was available about the middle of August and we immediately added this to the other total, securing over 90,000,000 bushels, as indicated in your editorial, which was based upon the Millers National Federation report. As the mill stocks this year were nearly the same as on July 30, 1925, there was no great news value in any story based upon the new figures, although we have been careful to secure them in order to base our work upon a complete knowledge of the facts. We prefer, of course, to use the report of the Bureau of the Census, since it has been based upon a larger sample of the mills in the country than have the previous reports of the Millers National Federation.

"As you know, we have been furnishing reviews of the market situation for your paper and are reluctant to have you believe that the Department's reports do not take into consideration all available facts."

ELEVATOR SYMBOLIZES GROWTH OF TOWN

By C. HYDE

The coming of the railroad—and with it the grain elevator—to the little town of Burr Oak, Mich., where there are about 700 inhabitants, created a



BURR OAK (MICH.) ELEVATOR

contention which is said to be unique in the annals of the state. Before the advent of railroads, mail was taken by stage or on horseback to some reliable farmer resident for him to distribute. That was about 75 years ago. But the original Burr Oak postoffice was four miles northwest of the present village. Then came the railroad, the necessary land being deeded to the railroad by William Locke, and a new postoffice was established in what was then called Locke Station. The Burr Oak postoffice was discontinued by the Government.

But the Burr Oak inhabitants put up a keen fight about this, at which they were no mean "pikers". So, to compromise, the Government changed the name of the postoffice at Locke Station to Burr Oak. Then the villagers around the station proceeded to make a protest and the railroad joined in the inditing of objections. Majority ruled, however, as it has a habit of doing in this country of ours, and Burr Oak it has been ever since.

Since the surrounding area is a rich farming country, especially is the raising and shipping of thousands of bushels of potatoes, Burr Oak fast became an important shipping point. The kind of elevator then in use was an inclined plane up several feet from the ground level at the freight building, at which farmers drove their teams up one side of the plank bridge-like structure, and down on the other side. They shoveled out their wagon loads of produce themselves, if the produce was not in bags or other containers, into the second story of the freight house.

The railroad was built in 1852. Ben Sheldon, an

old resident, was manager. When the Campbell Corporation, of Kendallville, Ind., built the modern elevator in the year 1900, the business from the adjacent territory had grown to respectable proportions. The same company also built other elevators at suitable locations in both Indiana and Michigan.

The company's house at Burr Oak, Mich., has dimensions of 40 feet in width and 70 feet in length, and is a four-story structure. There is a storage capacity of 12,000 bushels, which is divided into 12 bins measuring two by six. The equipment includes one grain clipper with a capacity of 300 bushels per hour, and the power used is electric. It comprises a 10-horsepower motor, using a drive belt. There is one fabric belt conveyor, 70 feet by 18 inches, and for unloading the elevator uses a modern wagon dump. Two standard make scales constitute the weighing facilities.

The elevator handles chiefly wheat, rye, oats, corn, seeds and wool. Charles H. Willer, who was reared in the town of Burr Oak, is the present manager in charge of the elevator's operation.

POISON GAS FOR FRENCH GRAIN PESTS

Poison gases similar to those used in the World War are being used against grain parasites in France, according to Gabriel Bertrand, one of a delegation of French scientists in this country to visit the golden jubilee session of the American Chemical Association. M. Bertrand declares that the peacetime use of gas in the field of applied chemistry is but one of the achievements of science which have benefitted the continental grain farmer since the war.

THE SITUATION AT PRINCE RUPERT

The first ship to call for grain at Prince Rupert, Canada's northern grain port, will be one chartered from a Japanese line. It will tie up at the Prince Rupert Elevator early next month. All together, 30 or 40 large freighters will call during the fall shipping season.

The number of sacks of grain per ship will vary from 1,000 to 28,000, and these will all have to be filled on the waterfront. Sacking costs something like \$3 a ton, and the Yamashita Shipping Company have undertaken to ship bulk grain from Prince Rupert at \$4 a ton, consequently the ships will fill their lower holds with grain and leave the between decks for cargo.

The lining of freighters calling for grain will be undertaken by the Prince Rupert drydock, and final arrangements for this work to be carried out in Victoria, have been completed with B. C. Keeley, Pacific Coast manager of the Canadian Government Merchant Marine.

Because of the necessity for a mixed cargo, ships carrying grain from Victoria to the Orient are very keen on securing cargoes comprising salt fish products, fertilizer and cedar logs, especially the latter. Cedar logs make excellent deck cargo, being light in weight, and not greatly affecting the draught of a vessel. If Victoria, Vancouver Island district, cannot supply such cargoes, the ships will fill their lower holds with grain, and pick up the balance of the cargo enroute.

NEW AWARDS IN GRAIN SHOW

The directors of the International Grain and Hay Show announce that new classes have been added this year for barley, field peas, and Alfalfa seed. The show as usual will be held in conjunction with the International Live Stock Exposition which begins November 27 and ends December 4. in Chicago, Ill. Nearly 100 contests between samples of 23 different field crops will be staged at the eighth annual international exhibition. Grain growers may send specimens of their grains, small seeds, and hay without charge. To "equalize competition," the directors have divided the continent into eight regions of approximately similar crops.

The How, When and Why of Wire Rope

Some Useful Suggestions on Measuring, Lubricating, Splicing, Seizing and Socketing of Wire Rope

By WALTER VOIGTLANDER, M. E.,
Rope Engineer, American Cable Company

EVERY grain elevator manager or mill superintendent will subscribe to any reasonable method or policy that will reduce operating expenses at no sacrifice to efficiency. Naturally the interest in such a method will be greatly increased when it is shown that the departure from standard practices will not only decrease expenses but simultaneously increase efficiency.

It would perhaps be improper so say that one part of a machine was more important than another part, since all parts are so interdependent that to give efficiency any machine must act as a unit. That wire rope is a major operating element in car pulls, man hoists, and other machines, will be agreed by all, however, and it is the two-fold purpose of this article to show how a possible change in wire rope usage may both decrease operating expense and increase general efficiency; and to present the best known methods for wire rope maintenance.

For nearly 100 years wire rope has remained

torsional stress that exists in ordinary rope and so grain internal torsional stresses are reduced to practically nil. These two features yield a greater useful allowable stress in the wires for actual operating service. Longer life is the result, as has been proven in many field tests and corroborated by laboratory tests.

When the separate wires in a rope break, they invariably stick out from the rope, frequently bend back and break off, leaving a gap in the strands.

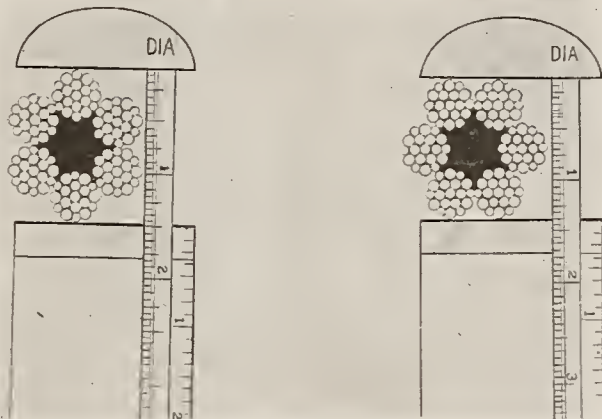


PLATE NO. 1.—CORRECT AND INCORRECT WAY TO MEASURE WIRE ROPE

This causes less bearing surface on the rope resulting in greater wear on both the remaining wires and on the sheave. In the preformed wire rope, however, broken wires lie flat, thus protecting both the remaining wires and the sheaves.

HOW TO MEASURE WIRE ROPE

There is only one way to correctly measure wire rope and that is shown in contrast to the incorrect method, by the accompanying illustration (Plate No. 1). It is highly important that the proper size of rope be employed since an undersized rope will not give the degree of service that should reasonably be expected, while an oversized rope represents needless investment and will not properly operate over sheaves grooved for smaller ropes. More important, however, is to have the rope and the sheave properly fitted. Wire rope should not be allowed to travel over a sheave wherein the

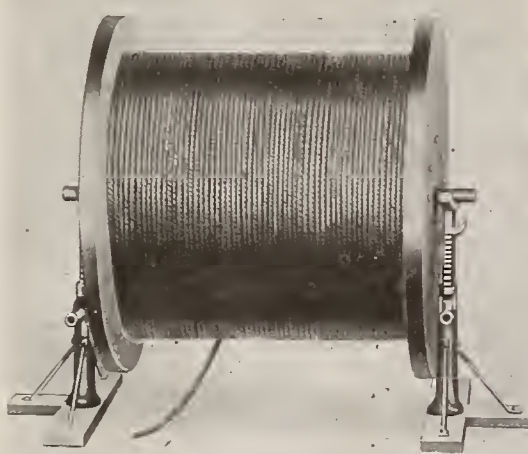


PLATE NO. 2-A.—USING JACK BRACKETS HANDLING WIRE ROPE

groove is too small for its diameter. A pinching sheave groove will do more damage to a wire rope in one hour than a properly grooved sheave in an entire week or more. Sheaves grooved one-sixteenth of an inch larger than the diameter of the rope will lengthen the life of the rope several times as compared with rope life on pinching sheaves. Since sheaves are cheaper than good wire rope, there is small economy in continuing the operation of improperly grooved sheaves or drums. Also the tread diameter of sheave or drum greatly effects rope life. Large diameter sheaves should be used wherever possible.

Wire rope is ordinarily shipped and received

either in coils or on reels. When uncoiling or unreeling wire rope it is very essential that no kinks are allowed to form. Once a kink is made, no amount of twisting or strain can take it out and the rope is unsafe for work. Never uncoil a wire rope as might be done with a rubber hose or manila hemp rope. Lift the coil to its edge and unroll the coil, allowing the rope to lie flat until used. Contrasting methods are shown in the accompanying reproduction (Plate No. 2).

When wire rope is received on a reel it must never be taken off or unreeled, as shown in "wrong way" illustration, for such a method will invariably develop kinks and spoil the rope. If a jack-bracket for the coil is unavailable (as shown in Plate No. 2-A), turn the reel on edge and roll along the ground.

LUBRICATION

The cores of practically all good brands of wire rope, both the preformed and non-preformed types, are thoroughly impregnated with a commercial chemically neutral rope oil. While the coil retains a liberal supply of this lubricant which gradually oozes out as the rope is used, still, frequent application of a good lubricant during service is necessary to prevent the core from becoming dry. A dry core will both wear and crush quicker than one that is thoroughly lubricated. It will also absorb moisture

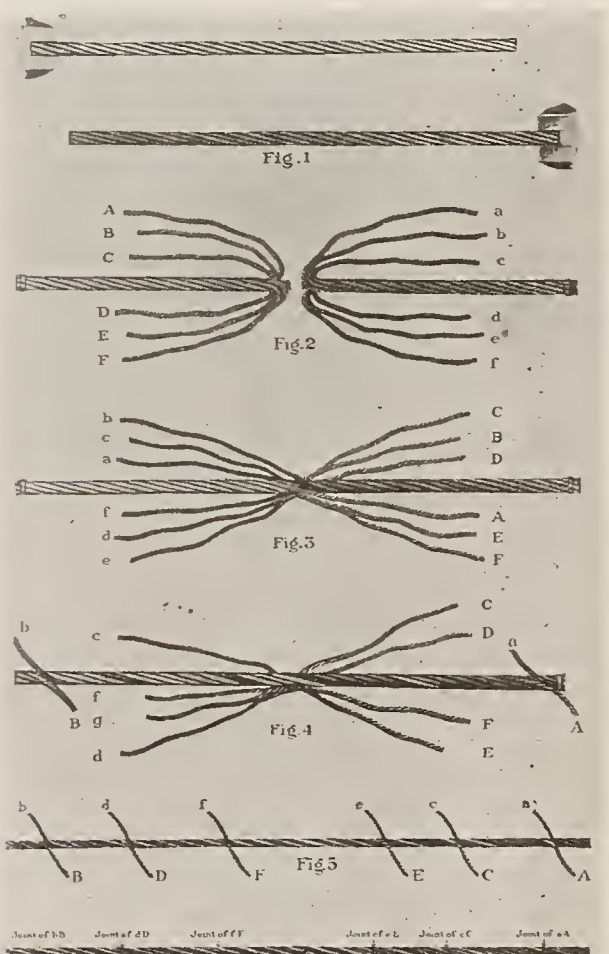


PLATE NO. 3.—HOW TO SPLICE WIRE ROPE

readily with the result that the core will deteriorate rapidly and the inner wires corrode.

The smaller the sheaves or the heavier the tension on the rope, the more often the rope should be lubricated so as to prevent the too rapid wearing of the core in the first case and the excessive crushing in the latter case.

A good lubricant will retard corrosion of the wires, slacken deterioration of the core, reduce internal friction and decrease external wear. The lubricant should be thin enough to penetrate the strands and the core but not so thin as to run off the rope. Ordinarily, a thick semi-plastic compound applied hot (in a thinned condition) is best wherever possible. It will penetrate while hot, then cool to a plastic filler, thereby preventing the entrance of water. In this way the inner wires and core are both preserved and lubricated.

To properly lubricate with a heated lubricant, it is necessary to have the rope run slowly through a tank of heated oil so that proper penetration is effected. Where this is not possible, an application of a thinner unheated lubricant gives better results.

It is always well to lubricate the rope just after



PLATE NO. 2.—WRONG AND RIGHT WAYS OF HANDLING WIRE ROPE

pretty much the same in the matter of general fabrication with the result that to the great majority of managers wire rope was merely wire rope, with little or no semblance of individuality or identifying characteristics. Such an impression was more or less justified up to three or four years ago when a practical, commercial means was found whereby the wires and strands that enter into the construction of rope, could be preformed or preshaped. This discovery permitted the development of a revolutionary change in wire rope manufacture.

Instead of merely twisting a number of wires into a strand, then twisting several strands into a complete rope (which twisting would naturally result in great internal strain thus reducing the resiliency and over all efficiency of the completed rope) the preformed wires and strands were laid in place without force or twisting. The obvious result was a rope more mechanically perfect.

With such a rope the applied loads are more evenly distributed throughout the component wires and strands, thus reducing unbalanced wire stresses. This yields an actual higher safety factor. The fact that a preformed rope will not unravel when untied at the ends proves the absence of a

installation and before running in service, particularly if the ropes have been kept in storage for some time.

HOW TO SPLICE WIRE ROPE

In order to prevent appreciable loss of strength at the splice, it is customary to make the length of splice not less than that given below for ropes of different sizes:

Diameter of Rope	Length of Splice (feet)
1/2 inch	15
5/8 " "	20
3/4 " "	24
7/8 " "	28
1 " "	32
1 1/8 " "	36
1 1/4 " "	40
1 1/2 " "	45

In splicing the two ropes, fasten the ends so that they overlap, allowing for a splice of from 15 to 45 feet as indicated by the above table. For purposes

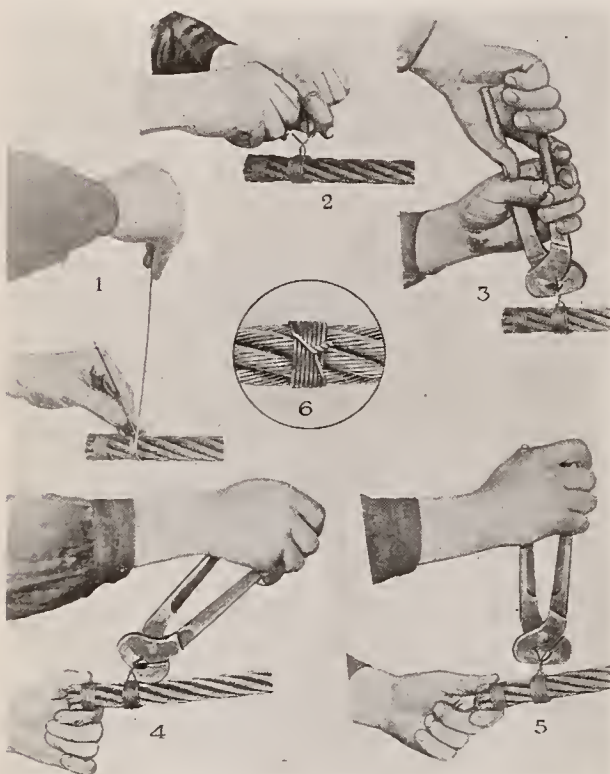


PLATE NO. 4.—PROPER METHOD OF SEIZING WIRE ROPE

of explanation, we will assume a 30-foot splice. First wrap or tie the ropes securely with iron wire 30 feet from each end, then unlay all strands 15 feet, *Fig. 2, Plate No. 3*, cutting away the hemp core to permit bringing the two unstranded ends together so that the strands will interlock as in *Plate No. 3, Fig. 3*.

Take strand *a* and unlay it until the wire binding is reached, and in the open groove place strand *A*. Lay *A* in tightly as shown in *Fig. 4*, making twist agree exactly with the twist of the open groove. Proceed in this way until all except two feet of *A* are laid in and then cut off *a* and *A*, leaving ends about two feet long. Now unlay strand *B* in the opposite end and in its place put strand *b*, stopping the end of the rope in the corresponding position to *A*, *Fig. 4*.

Subsequently *c* will be replaced by *C*, but this should be stopped six feet short of the junction of *A* and *a*, as shown in *Fig. 5*. Similarly, *D* should be replaced by *d* and the end stopped six feet short of *Bb*. Proceed similarly with *Ee* and *Ff*, stopping the ends six feet short of *Cc* and *Dd* respectively.

This rope will now present the appearance shown in *Fig. 5* and the only remaining step is to tuck in the ends in such a way that the diameter of the rope will not be increased where the ends are tucked in. This is done by removing the hemp center and putting the ends of the strands in the place previously occupied by the hemp. To do this, it is first necessary to open up or untwist the strands at *Aa* so that the hemp center can be seized with a pair of pliers and pulled out. Then a marline spike is inserted under the two strands nearest the loose end of rope and after starting the loose end into the space left vacant by the hemp center, rotate this marline spike so as to force the strand into place. Repeat this operation at *Bb*, *Cc*, *Dd*, *Ee* and

Ff and hammer the rope lightly with wooden or copper mallet to give the rope a uniform diameter.

SEIZING

The end of an ordinary wire rope should have at least three seizings to prevent unlaying, which, if it occurs, would render the rope useless. The seizings may be replaced by fittings if they prevent unlaying of the rope. Annealed iron wire should be wound tightly in a close helix around the rope.

1—Wind the seizing wire on the rope by hand, keeping the coil together and considerable tension on the wire, winding over from left to right as in 1, *Plate No. 4*.

2—Twist the ends of the wire together counter-clockwise by hand so that the twisted portion of the wires is near the middle of the seizing.

3—Using Carew cutters, tighten the twist just enough to take up the slack. Do not try to tighten the seizing by twisting.

4—Tighten the seizing by prying the twist away from the axis of the rope with the cutters, as indicated in *Fig. 4*.

5—Tighten the twist again as in 3. Repeat 4 and 5 as often as is necessary to make the seizing tight. Cut off the ends of the wires and pound the twist flat against the rope.

6—The appearance of the finished seizing is shown in *Fig. 6*.

Any annealed low carbon steel wire may be used for seizings. This method is taken from the United States Government Master Specifications No. 297.

SOCKETING WIRE ROPE

There is generally a right way and a wrong way to do any job. It has been found that the following method, and as illustrated in *Plate No. 5*, gives the strongest and most uniform results.

Measure back from the end of the rope a distance equal to the length of the tapered basket of the socket. Tie securely at this point with soft iron annealed wire and add two additional tie wires below the first. Open up the strands as in *Fig. 1* and cut the hemp core as far down toward the tie wire as possible. Unlay each wire and straighten so as to form a "brush" as in *Fig. 2*. On large ropes, it would be necessary to use a small pipe over each

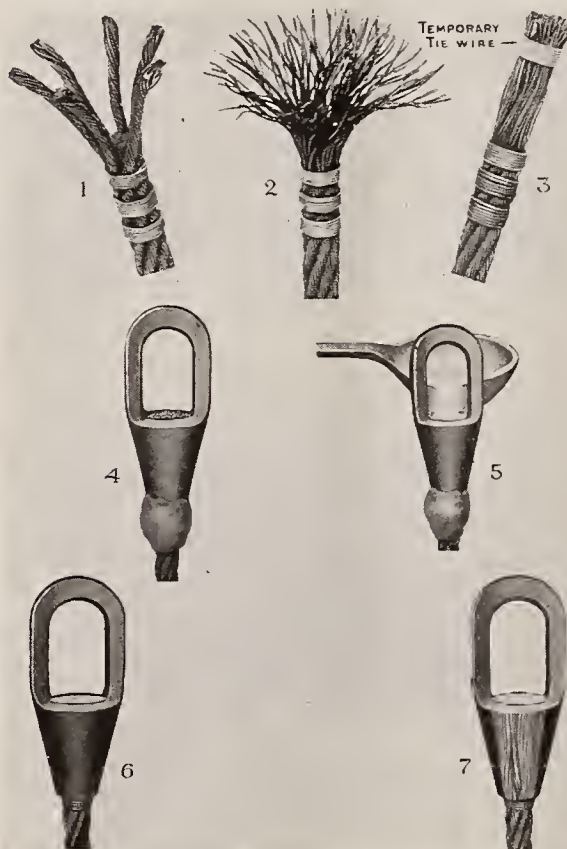


PLATE NO. 5.—HOW TO SOCKET WIRE ROPE

wire to straighten to approximately remove all curl from the wire. If wire is very greasy, hold the "brush" over a pail of gasoline with wires down and wipe off the grease with waste or paint brush dipped in gasoline. Wipe dry.

Dip the "brush" holding the wires point down, into a pot of muriatic acid solution (50 per cent water, 50 per cent commercial acid). Insert to a depth so as not to immerse the end of the hemp core. Keep in the acid until the wires are clean. Still holding the wires down, withdraw from the acid and knock the rope sharply with a stick (broomstick or hammer handle).

Place a temporary tie wire, as in *Fig. 3*, over the

ends of the "brush" taking care not to handle the cleaned wires with greasy hands or tools. Insert the rope end into the socket. Cut the temporary tie wire. Set the rope vertically in a vise; set the socket so that the wires come flush with the top of the basket of the socket with wires spread out; seal the bottom of the socket with clay or asbestos as in *Fig. 4*.

If cold, warm the socket moderately.

Pour with pure zinc (not babbitt, lead or other alloy) as in *Fig. 5*. Tap the side of the socket with light hammer while the zinc is still fluid, so as to jar the zinc into crevices between the wires. When cool, remove the fire clay and the serving wires, and the joint as per *Fig. 6* will result. It will help slightly in the flowing of the zinc among the wires to put a small quantity of salammoniac crystals over the wires just prior to pouring the zinc.

Fig. 7 shows a phantom view of the zinc cone with imbedded wires.

There is no business or industry that has lowered its production costs to the irreducible minimum, and until this has been done, the greatest amount of profit cannot be realized. Reduction of operating costs rests as much, if not more, in the smaller details than in the major items of equipment. No superintendent ever contracts for a large investment without serious consideration. This is as it should be, but there are some who do not give proportional degree of consideration to the minor items of equipment, notwithstanding that in the aggregate they represent a far greater investment than the larger single items. Only by paying constant attention to the little things can we hope to write larger figures on the right side of the ledger.

LESS BARBERRY, LESS RUST

Results at the end of the eighth year of the campaign against common barberry, as summed up by Dr. F. E. Kempton, in charge of the project for the United States Department of Agriculture, show that practically all of the 12,139,021 bushes, sprouting bushes, and seedlings found in the 13 states have been destroyed. By the use of salt or kerosene it has been possible to destroy the bushes beyond any possibility of future sprouting.

Under the direction of leaders in the 13 states, 266 field men and squad leaders started on the present season's work July 1. The men in Michigan, Ohio, Illinois, and Montana are attempting to complete the preliminary survey in those states. A thorough second survey is being carried on in Minnesota, Wisconsin, North Dakota, South Dakota, Iowa, Nebraska, Colorado, Wyoming and Indiana, where many escaped bushes are being found.

DECLARES FARMERS' ELEVATORS ARE PROSPEROUS

"Are most of the farmers' elevators broke? Are the managers inefficient and unqualified for the jobs they hold as has been intimated in some quarters?" Lawrence Farlow, secretary of the Illinois Farmers Grain Dealers Association, was asked these questions, and his answer was:

"They are not."

Of 189 farmer grain companies of which he has up-to-date information, he says 133 have surpluses, and only 52 have deficits. He says: "The total outstanding capital stock of these companies is \$3,945,799. One hundred and thirty-three of the companies have surpluses totalling \$1,665,811. Fifty-two have deficits totalling \$759,334. The present worth of the entire group is \$4,852,276, showing a net surplus of \$906,477. These figures are based on the present outstanding stock, of which more than a half million dollars is earned capital that has been paid out in stock dividends.

"This group includes a number of the companies that have had extreme losses as well as many of the most successful ones. One company shows a deficit of \$71,000, which is by far the biggest deficit in the state. One company has a present worth of \$130 a 10-dollar share. Several have paid out in cash dividends more than the original capital stock. This is not a complete survey but it represents the largest group that has as yet been tabulated."

Helping Handle the Spokane Valley Crop

Two Farmers' Elevators Meet Signal Success in Pacific Northwest
with Grain and Sidelines Under the Operation of the
Davenport Union Warehouse Company

By H. W. JEFFRIES

LOCATED in the prosperous Big Bend country of Washington, is the busy town of Davenport and no less busy is the elevator and warehouse of the Davenport Union Warehouse Company. This company is a co-operative concern and was organized in 1909 by the farmers of this community. Its membership totals 150 and it is capitalized for \$75,000, of which \$56,000 is paid in.

This healthy, thriving business is under the guidance and management of Bian Smith, who is the smiling gentleman you see in the accompanying picture. Mr. Smith wouldn't tell me very much about himself but he did have a lot to say about the business. At the time of my visit he was not so very optimistic about crop conditions as an early frost has greatly retarded the grain in that section. However, he held out hopes for a fair yield provided the warm weather continued and rain fell.

The storage tanks shown in the picture are 16 feet inside diameter with a height of 30 feet. Warehouses in this section of the country assume greater importance than do bulk storage facilities as grains for the most part are handled in sacks. Their principal warehouse measures 130 by 40 feet and another 50 by 80 feet. Five of the circular tanks are made of concrete and the other three are constructed of steel. These tanks have a combined capacity of 45,000 bushels. The warehouses offer 60,000 bushels sack storage and they also provide additional bulk storage of 25,000 bushels as one of these has a number of wooden bins.

The receiving capacity is 1,000 bushels hourly and the shipping rate is the same. They operate one Monitor Separator, which can handle 1,000 bushels hourly. As a sideline to the elevator business, they have a roller mill working on feeds. This mill was made by Gilbert Hunt of Walla Walla,

of the work and have been giving excellent service. These stackers are driven by motors of three horsepower rating.

No belt conveyors are in use although 160 feet of the spiral type is used to transport the grain about the plant. The trucks and wagons loaded with grain are weighed on a 15-ton Fairbanks Scale and unloaded by the usual type of wagon dump. Other weighing equipment includes a six-bushel automatic scale for checking outgoing grain. It is the company's intention to install an automatic truck scale this summer in order to be ready for the fall rush.

Water barrels are to be found in abundance throughout the plant and a large number of chemical extinguishers can be seen. The principal grains handled are wheat, barley and oats. Very little is shipped out to other markets as the local demand is sufficient to utilize nearly all receipts. Included in this local demand is a good market for feeds and the roller mill is kept busy as a result.

With the equipment it has, a total of 500,000 bushels yearly can be handled at the Davenport plant. This company also operates a thor-



BIAN SMITH, MANAGER OF THE DAVENPORT COMPANY

oughly modern concrete elevator at the neighboring town of Mondovi. Last year crop conditions were not exceptionally good and only 230,000 bushels were handled at the home plant. The Mondovi elevator took care of 60,000 bushels prior to the fire which destroyed its interior. In 1923, which was a good year, the two plants combined handled 600,000 bushels of grain. In a general discussion of crop and business conditions, Mr. Smith named 1915 and 1916 as years when business had also been exceptionally good.

Sidelines include coal, fence posts, binding twine and grain sacks; in fact, it might be said their sidelines were all inclusive for Mr. Smith says they will get anything they haven't got for their customers. Grain sacks are considered a fine sideline, as they show a good margin of profit with large sales when crop conditions are right. The number handled is, of course, entirely dependent upon the size of the crop harvested. A poor yield means a yearly sale of possibly only 50,000 sacks, whereas in good years this figure has risen as high as 500,000.

Coal is also a good seller and about four carloads of Montana and Wyoming coal are disposed of yearly. The Yakima Valley furnishes yet another sideline and this is Alfalfa hay. When climatic conditions are unfavorable for grazing this item assumes importance on the sales report. Last winter was quite open and the result was a very light demand for this article with a total sale of only four carloads. Years when the snowfall has been heavy the demand for Alfalfa has also been heavy and sales of 20 carloads a season are not unusual.

The Mondovi Elevator of The Davenport Union

Warehouse Company was built in 1909. It is made of reinforced concrete and the value of this type of construction was clearly demonstrated last year when a fire started which completely destroyed the interior with its equipment. The building was left standing, unharmed and intact. New machinery was promptly ordered but could not be installed in time to take care of last fall's business, as the work of rebuilding was not completed until November.

The elevator consists of four main tanks with a capacity of 65,000 bushels and they measure 16 feet inside diameter and rise to a height of 72 feet. The headhouse and four interstice bins have an additional capacity of 60,000 bushels. The receiving capacity is 1,000 bushels hourly and the shipping rate is the same.

The prime mover is an 18-horsepower gasoline



DAVENPORT UNION HARDWARE COMPANY'S MONDOVI (WASH.) ELEVATOR

engine. The main drive is by belt with rope transmission on the elevator machinery. Unloading is speedily handled by an automatic dump with a Fairbanks Trip Dump Scale of 15 tons' capacity.

A total of about 100,000 bushels in bulk and 90,000 bushels in sacks can be handled in a year. A large warehouse, not shown in the picture, measures 200 feet long and is used for storing sacked grains. It is not to be expected that this building would show up very prominently, as the elevator itself rises above anything in the surrounding country and is visible for miles.

The Mondovi Elevator is operated and managed by Walter Smith, a brother of Mr. Smith at Davenport. The Northern Pacific Railroad supplies both elevators with ample shipping facilities.

ENGLISH GRAIN TRADE'S "LIBERTY ENTRAPPED"

Left wing legislative elements in this country struggle, from time to time, for a Government grain export selling agency. Off the same piece of cloth is idea of the Government grain import board, proposed by the Labour Party of England. *Milling*, published in Liverpool, makes the following editorial comment under the heading "Liberty Entrapped:"

"They would 'transform' the whole business into a public service and 'place the responsibility for it in the hands of an Import Board specially constituted as a business corporation for this purpose.' Parliament would dictate the Board's policy, and to Parliament the Board would have to render an account of its stewardship, through its appointed mouthpiece. The Minister of Agriculture or the president of the Board of Trade would be responsible for the appointment of the members and the Board would be under the management of directors. 'It should be as free to manage the details of its trading operations as a private concern would be.' It sounds like it. It would be as free as a mouse in a trap. . . . Any intelligent reader would perceive without suggestion from an experienced mind that in less than a month the grain trade would be in a chaotic condition, from which it would have to be rescued by the despised and rejected merchant and capitalist."



PLANT OF THE DAVENPORT (WASH.) UNION WAREHOUSE COMPANY

Wash., and is of three tons' capacity. Power is electric and is supplied by high tension lines from Spokane, which is but 20 miles eastward. The majority of visitors to Spokane are impressed with its development of hydro-electric power.

The Spokane River, which flows through the heart of the city, has a fall of 1,280 feet from its source in the Coeur d'Alene Lake to the Columbia River. There are six different hydro-electric installations and these have a combined output of 186,000 horsepower. It is interesting to note here how a prophecy made 50 years ago has been fulfilled. Governor Stevens was then in charge of Washington Territory and while standing beside the lower cataract of the Spokane River, he remarked to an aide, "Some day this will be a great grist milling center." From the same point today one sees a magnificent power plant which supplies the electricity for turning the rolls of many mills located in this Inland Empire.

Due to the relatively large amount of grain handled in sacks, special equipment must be used to make this handling both speedy and efficient, so two portable stackers, take care of this phase

Secretary of War Receives River-Storage Report

Next Congress Likely to Act on Upper River Grain Elevator and Bonded Warehouse Proposal in Form of Bill--Merits of Plan Discussed

By HALLECK W. SEAMAN, Board Member, Inland Waterway Corporation

WHEN the first east and west railroads were built westward from Chicago, to penetrate the farming country which was being opened up in Missouri, Iowa, Minnesota and beyond, they found an active steam-boat trade already in existence on the Mississippi River.

The river towns which were their first objectives were local markets offering freight possibilities resulting from the trading which the steamboats had built up.

Lateral roads and some limited railroad construction penetrating the interior of these states was already bringing the grain and other farm products to these river towns. Here it was the basis of trade already stimulated by the outlets which the river afforded. The river was the active agent. The roads and the new railroads were the feeders. The river was the base line, and from this base line outward the original deflection was southward, toward St. Louis, and finally to the world at large through New Orleans.

GENESIS OF GRAIN EXPORT MOVEMENT

As this territory began to produce an exportable surplus of grain, the bulk shipment method, in contrast with sack shipment, grew in favor. Its cheapness recommended it, and as the railroads became more and more dominant, this method became almost universal, except on the Pacific Coast and in the Southeast. A small local track elevator became as much a necessity of the pioneer railroad settlement as the depot and the team track. The box car became the universal carrier of grain, and at the terminus of the railroad large storage elevators were erected, so that the box cars might be released of their loading, irrespective of the exigencies of trading.

The first of these terminal elevators were built at these market towns along the Mississippi River, and the first local rates on grain which the railroads made were to these river crossings. By the early eighties every one of these market towns on the banks of the Mississippi from Cairo and St. Louis up to St. Paul and Minneapolis had one or

In those days there was in New Orleans Harbor a whole fleet of floating elevators, which transferred the grain directly from the barges to ships waiting to receive it.

As the railroads from Chicago were extended westward, they absorbed the original lines running westward from Hannibal, Burlington, Muscatine, Davenport, Clinton and Dubuque. Chicago became the greatest grain market of the world, and the pull



HALLECK W. SEAMAN

of the Great Lakes as grain carriers to the eastward began to be felt more and more. The new railroad systems, with their principal termini at Chicago, began to strive for the long haul, so they again built greater storage elevators on the banks of the Chicago and the Milwaukee Rivers. The Mississippi River was unimproved. The railroads saw to it that it remained unimproved. Conversely,

With the withdrawal of the river service, most of the elevators on the upper river fell into disuse. They were all wooden structures and required heavy maintenance. Their original purpose as a means of releasing the western railroad cars at the eastern termini of those lines had ceased, for the termini themselves had moved eastward to Chicago. No through eastern railroad system has ever touched the Mississippi River above Keokuk. Efforts to bring eastern railroads to the river bank above there were always thwarted or bought off. So, as the elevators no longer formed a facility which was necessary to the operation of the western railroads, they either burned down and were not rebuilt, or they were converted to other uses, pulled down or abandoned, to save maintenance.

But the Mississippi River, as the principal basing line for grain rates has persisted without any interruption. No through rates on wheat or corn from Iowa or Missouri, or from the vast fields beyond the Missouri River to the eastern seaboard, have ever been made lower than the rates to the Mississippi River, plus the published rates, from these Mississippi River crossings and market towns to the eastern seaboard.

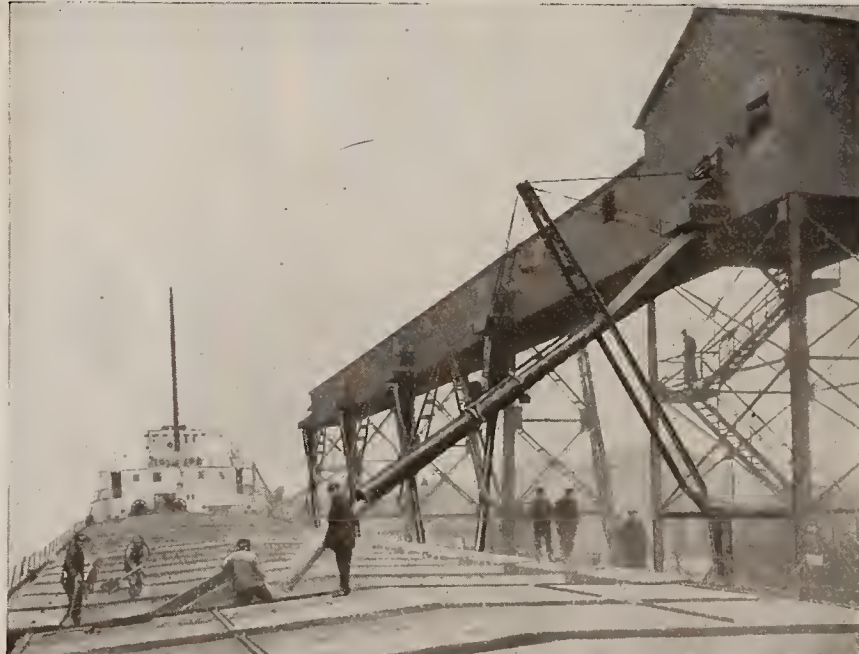
SITUATION AT ST. LOUIS

This has been due, first to the fact that St. Louis has always been an east and west railroad gateway second in importance only to Chicago. Until recent years the shortage of box cars and their abuse by foreign lines caused the western railroads to refuse to let grain go beyond their eastern termini in western cars. St. Louis was on the Mississippi River, and it was one of the greatest of these eastern termini, and western grain was required to be transferred from western to eastern cars here, even for through movement. There were greater elevator facilities at St. Louis than at any Mississippi River crossing between Minneapolis and New Orleans.

Besides, and somewhat due to this divergence of transportation interests, St. Louis has always remained a great primary grain market. Many



BARGES MEAN NOTHING WITHOUT THE MARINE LEG EQUIPMENT



GRAIN LOADING EFFICIENCY ON THE WATERFRONT

more such terminal elevators capable of receiving and storing the surplus grain for which the country stations had no adequate provision, and which the railroads could not hold in their cars. When this grain was afterwards sold, it went forward in barges down the Mississippi, and the marketing was based upon the cost of going down river to St. Louis, and thence much of it was exported to Europe by barge and shipped through New Orleans,

the connecting channels of the Great Lakes chain got themselves deepened, and the harbors were improved, until grain could be hauled much cheaper by lake than it could be transported down stream on the Mississippi.

RAILS KNOCK OUT RIVER TRAFFIC

Gradually what remained of the river fleets was eliminated by the ruinous competition of railroad rates, made without any regard to railroad costs.

of the elevators are now owned by grain firms and are the basis of marketing operations, quite aside from the release of cars.

So, St. Louis has been foremost in holding the most important basing line in the grain rate adjustment at the Mississippi River, and competing railroad interests have retained this basing line at points above St. Louis. Such a system has often been useful to the railroads in maintaining their

competitive adjustments on interstate traffic, when the individual states have taken a hand in the making of mileage rates on grain within their borders.

At any rate, at a time when all of the conditions which have been responsible for railroad rate adjustments are being subjected to the most intense scrutiny, and old adjustments based upon many forms of competition are being leveled and obliterated, this grain rate basing line at the Mississippi River has not been overturned, and neither carriers nor regulating bodies seem inclined to disturb it.

The river, therefore, is as potent as ever a regulator of transportation costs, provided only that facilities for its use or found.

The first and paramount necessity is again to provide adequate elevator facilities on the river banks. If these are assured, the fleets of barges and power boats will not be far behind. The appeal



MODERN WATERFRONT LOADING

Illustrations by courtesy of Webster Manufacturing Co.

for the elevator facilities is felt by the public more than by the railroads. Of late years the box car equipment of the country is so largely interchangeable that the self interest which caused railroads to try to confine their cars to their own rails has been subordinated to the public interest, and, under the direction of the Commission, cars may now be sent anywhere for loading and required to go anywhere without transfer.

OLD ARRANGEMENTS NULL AND VOID

Besides, the arrangements formerly existing between the railroads and certain great grain firms, under which all elevators both local and terminal upon a single railroad were leased to a single firm, and whole states parcelled out between four or five buying organizations, have passed into discard.

The co-operative farmers' associations are taking over the country elevators, and they are very properly looking for the provision of complimentary terminal storage, free from the control of either carriers or grain buying houses. These interests are demanding public elevators. What they require is great storage reservoirs at strategic locations, which will act as concentrating points to which their grains may be forwarded as the interior elevators become congested—into which their grain may be delivered if necessary without having to be sold, where their grain may be stored to await a more favorable market, and from which it may be forwarded by the most economical means of transportation to mills, factories, local distributing centers or ports of export, without requiring the sacrifice of any appreciable share of the freight paid to get it from the farm to such strategic storage points.

These Mississippi River crossings are the logical points for the construction of such facilities. From here the grain may go to local mills or may be

moved up to Minneapolis or to the eastward. It may go on to the Great Lakes at Chicago, or down the river to tidewater to New Orleans. Corn and oats may be moved down river to complementary elevators at St. Louis, Cairo, Helena, Memphis, Vicksburg or New Orleans, for transshipment to consumers in the southeast.

When it crosses the Mississippi River and passes on to Chicago, it cannot come back. It can then only go eastward. The Gulf and the Southeast are closed to it, and it cannot go back up river to the mills at Minneapolis. The best interest of the farming communities requires that these adequate modern elevator facilities shall be provided at the Upper Mississippi River crossings, to act as reservoirs for farm products. These same interests dictate that similar facilities shall be provided at the river bank at the lower Mississippi River crossings, to serve as centers of distribution into the Southeast and the Southwest.

This farmer interest does not want the railroad to control these operations—the lure of the long-haul is too much of a temptation. And, it is equally opposed to their being owned, operated or in any way dominated by the grain buying houses.

NEED FOR NEUTRAL OPERATION

These elevators should be public elevators in every sense of the word. The interests at stake are so conflicting and the enterprise so comprehensive as to location and expenditure, that it looks now as though the Government itself is the only agency equipped to handle the job. The Federal Barge Line is operating and making low rates. It has few points of contact with the farming population, because of the lack of these facilities on the river bank at these market towns and river crossings. Some Governmental agency should be directed to supply this deficiency in the interest of the farming population—and that too without delay.

These storage elevators will thaw out, as it were, the grain equipment periodically frozen when thousands upon thousands of box cars are massed at

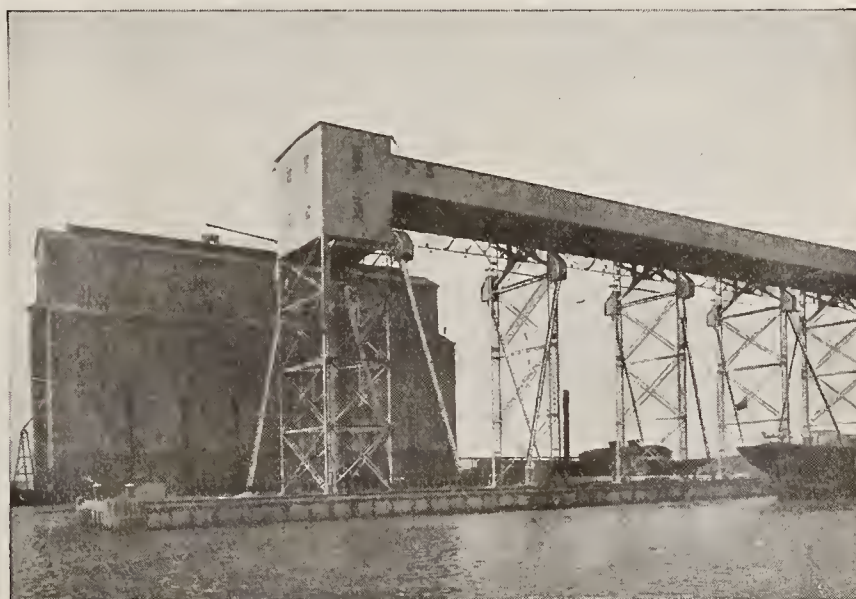
so expressed itself. The operation of the Government owned barge line on the Mississippi and its tributaries offers a new and compelling reason why the Government should take prompt action to redeem its promises by actual performance.

These elevators should function in all respects as "common carriers," or, as that term is more generally understood, as "public elevators," that would treat every patron alike for the same service. Yet, again, the interests involved are so conflicting, and the enterprise itself is so comprehensive, both as to location and as to the magnitude of the expenditure, that the question as to what interest shall dominate the policy of these elevators becomes a live issue.

PRIVATE OPERATION CONSIDERED

Until recently I have been of the opinion that rather than have the Government operate these elevators under some duly safe-guarded agency, it would be better all around if they were to be privately owned and operated, or built by the Government and then leased to private interests—railroads, co-operative, or professional warehousemen—but in any event that their operation should be supervised by the Government. Provision is made for such private operation under the United States Warehouse Act of 1916-1919. This law, as explained by me in an address delivered before the Farmer-Manufacturer Convention, at Chicago, on February 13, 1924, authorizes the Secretary of Agriculture to license such warehouses and to supervise their operation. Further commenting on the benefits to the farmer of such public storage at strategic points, I stated:

The law provides for issuing a form of negotiable warehouse receipt which constitutes a specific definite contract between the depositor and the warehouseman and also carries full information as to grade, weight and condition of the grain. In other words, it gives all the information that a banker whether in Iowa or New York City or any other place needs to determine whether he can afford to make a loan. That this supervision is effective and results in a high form



DEEP CHANNELS CALL FOR APPROPRIATE CHANNEL-SIDE FACILITIES

Baltimore and other seaboard terminals awaiting boat movement. With ample storage facilities at river crossing towns, the railroads can shuttlecock their grain cars between country elevators and the river crossing warehouses, and thus avoid the annual specter of an embargo on grain shipments to export gateways or for domestic movement. Such interruptions in the free flow of grain at the critical harvest periods means a huge loss in the aggregate to the farmers, and that loss is eventually reflected upon the financial structure of the country as a whole. This waste is wholly avoidable, and the answer lies in the *Government bonded warehouse*, that will be fair alike to the farmers, the grain dealers, the railroads and the barge line. Such neutral warehouses should work in admirably with any and all co-operative plans thus far advanced by the farm interests.

Every administration at Washington, regardless of party affiliations, has always been willing and anxious to provide constructive relief for the farmers. The present administration has repeatedly

of collateral is evidenced by the fact that hundreds of millions of dollars have been loaned on such collateral without a cent of loss. These receipts the farmer can take to his local banker who in turn will find them acceptable for rediscount purposes at the metropolitan banks, the Federal Reserve banks and the Intermediate Credit Banks.

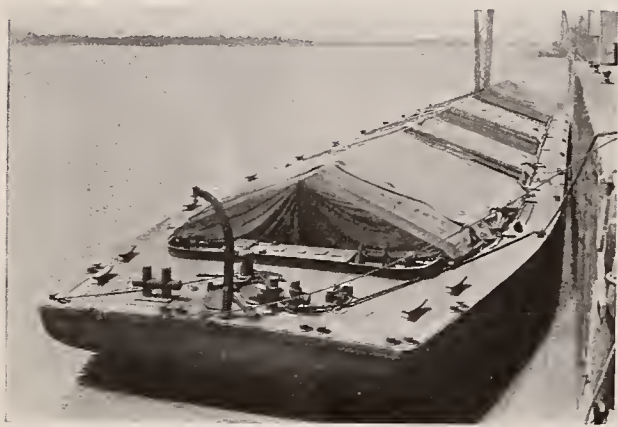
The country bank cannot loan to advantage against wheat or corn in the farmers bin or crib; in fact it should not, and it does not, but it loans on what the banker knows about the farmer and his moral responsibility. With warehouse receipts issued under the United States Warehouse Act as collateral a bank with limited capital can extend its loaning ability greatly. Having these workable protective Federal laws already in the statute books, it is highly expedient for the Government to stimulate their use, and thereby enable the farmer to market his crops through the regular channels of business, and not through the intervention of the sheriff.

The Missouri Pacific Railway has on the river at St. Louis a large storage elevator, operated as a bonded warehouse, under the provisions of the United States Warehouse Act of 1916-1919. The multiplication of such facilities at river crossing points in particular will serve a variety of purposes. It will relieve grain car shortage at critical crop movement periods and enable the grain to be shipped later on by

boat or by rail without lost motion. It will provide the farmer or grain merchant with the highest grade collateral in the form of a bonded warehouse receipt. And last, but by no means least this storage will tend to the establishment in the grain producing sections of flour mills, corn syrup, starch, oatmeal and kindred plants, so that the by-products of conversion can be blended into commercial stock foods, which in the final analysis return to the soil the much needed mineral salts at practically no expense to the farmer, and in a balanced form—animal manure—that is exactly suited to his wants.

If the granger railroads will adopt this plan of storage warehouses at river crossing points, and give to it their honest backing, instead of hanging on to their iniquitous long haul of grains themselves to the seaboard, then they will densify the traffic on their local rails and recapture much of the low revenue transcontinental tonnage they have lost to the Canal. By joining wholeheartedly in the development of river transportation and its related industrial possibilities, they will establish public confidence in the integrity of the railroads and perform a service of incalculable benefit to the territory they serve. This matter is of such great and pressing importance that the Government can well afford, if need be, to provide a revolving fund from which either the railroads or terminal organizations, co-operative or otherwise, can borrow at low interest rate the necessary capital investment for terminal facilities.

In the light of existing conditions in the grain



TYPICAL 3,000-TON MISSISSIPPI GRAIN BARGE

belt I have come to the conclusion that if the farmer is to secure the prompt and permanent relief to which he is entitled, including the low cost barge haulage, then under all the circumstances it will be best if these public elevators be built, and, for the time being at least be operated by a governmental agency, that would function preferably through a division of the Department of Agriculture.

One of the reasons for this modification in my earlier views arises from the patent fact that if these elevators are not promptly erected, then no opportunity will be given to the barge line to help the farmer to the fullest extent along the river north of St. Louis. Other than at St. Paul there are at present no elevators on that stretch of the river for the transfer of grains from cars to barge, or from barge to cars, as the case may be.

Another imperative reason for the need of big storage elevators, is that collectively they will answer but the one single purpose, and consequently the job should be undertaken as one project. Negotiations with the various railroads, or with the, as yet, more or less embryonic farmers' co-operative organizations, would entail the loss of too much time. Once built, however, and their usefulness fully demonstrated, they could then in due time, if found expedient, be transferred to private ownership or operation, just as seems to be the declared purpose as regards the barge line itself, as is so clearly stated in the terms of the act under which the barge line is now operating.

It follows, therefore, that if, as now seems to be the program, the sum of \$100,000,000, or any such huge sum, is to be appropriated from the Federal Treasury to assist the farmer in the orderly marketing of his farm products, then such part of that sum as may be needed should first be devoted to the construction of these absolutely necessary storage warehouses, that is, if the farmer relief plan is to be made really workable. Such definite action upon the part of the Government would complete a gesture into a full accomplishment—would translate a promise into a worthwhile performance.

Such an investment, through the medium of the

bonded warehouse receipt, would automatically help the farmer to regain his independence; help him to maintain his self respect, by helping him to help himself. These elevators would almost immediately become self-sustaining. There would be no element of charity involved to taint the transaction—it would furnish him at the critical harvest period with a handy form of collateral for his grains, would put him in practically the same position that the gold miner now finds himself. The gold miner now is privileged to deposit his mixed bullion at—say the Denver Mint, and after being assayed and weighed, he gets in exchange therefore a draft upon the Treasurer of the United States, and for which draft he can either take gold bullion, gold coin or yellow backs. Nor is this a gratuitous service. The miner gladly pays a reasonable sum for the actual work done. The Mint is self-sustaining. It simply steps into the breach between the producer and the consumer of an essential product, and does its work of umpiring so justly and so satisfactorily to both sides that no complaint has ever been lodged.

Just so with the farmers' grain. After being assayed, so to speak, as to quantity and grade, the farmer would get back for his grain that has been lodged in the Government bonded warehouse, a form of receipt which would in effect be a draft upon the open grain pool of the world for the market value of his product—or, if he so desired, he could recover an equal amount of grain of that identical quality, upon payment of the regulation fee for storage, insurance and grading.

The open money market will absorb these bonded warehouse receipts with avidity, and to any extent, and at a remarkably low rate of interest, and thus leave the farmer (or the farm organization) as a free agent to take down instantly his margin of profit above his borrowings, if any, whenever he feels so disposed. These receipts pass title by manual delivery, and, once the grain is warehoused, no time need be lost in cashing in—a short wire to him his banker will turn the trick.

Such solid and substantial grain reservoirs would enable the farmer, either as an individual or in a co-operative way, to play with his carry-over grains the lean prices of the fat years against the fat prices of the lean years. Such reservoirs at the strategic river crossings would also become great stabilizers of prices, as they would make it possible to feed the grains to either domestic or foreign markets in an orderly manner, and without any back haul. Furthermore, they would help the farmer save from \$40 to \$75 per ton on commercial fertilizers, inasmuch as the by-products of the grain conversion mills could then be taken back to the farms as stock foods, and, after producing milk, butter, beef and pork for hungry humans, would still leave on the farm the residual manures containing nearly all of the mineral salts that were originally locked up in the stock food, and in the form of balanced fertilizers, for the rejuvenation of the soil. As before stated, if these grains once go beyond the Mississippi River crossings, they can never take advantage of the low cost barge haul, nor can the stock foods be returned to the producing farms except at an unnecessary additional cost for the longer back-haul.

Our Articles of Confederation left to the several colonies jurisdiction over their respective navigable waters. But after a trial this arrangement was found to be impracticable, and when the Constitution was framed there was reserved to the Federal Government exclusive sovereignty over all of our coastal and navigable inland waters. The regulation of interstate commerce was likewise reserved to the Federal Government. It is under this General Welfare clause of the Constitution that the Federal Government, in aid of our national commerce, dredges our seaboard harbors, and lights and patrols them. And the expense of all this comes out of the national treasury, for the manifest reason that it is only through these ocean ports, or funnels that the colossal \$10,000,000,000 of annual export and import business of our commonwealth can for the most part pass. This same free service is likewise extended to the harbors of the Great Lakes.

The Government has already expended around

half a billion of dollars for the improvement of the channels of the Mississippi and its navigable tributaries; it has inaugurated a barge service on the main stem of the river from Minneapolis to New Orleans, and will soon extend this operation over the Ohio, the Missouri and the Illinois. It has prosecuted this stupendous work in furtherance of more than a century-old policy of internal improvements, in aid of the agricultural and industrial advancement of the entire nation. With all this background of achievement, the next forward step in such an enlightened policy is to make these channels commercially workable, by furnishing the terminal facilities needed to admit of their functioning in a business-like way.

If the farmer is the backbone of the nation, then the nation must see to it that his backbone is outfitted with the necessary spinal cord that will enable the farmer to live, and that will enable him to market his surplus products in competition with foreign products in the markets of the world. The low cost haulage of the Federal Barge Line is the master-key to the solution of this pressing problem. One indispensable unit of an adequate system of river terminals is the combined bonded warehouse and storage elevator, at all rail-river crossing points.

Out of approximately 875,000,000 bushels of wheat produced in the United States in 1924, we only exported some 156,000,000 bushels, and of this amount, because of the lack of terminal and barge



FURTHER RIVER GRAIN LOADING APPARATUS

equipment, the Federal Barge Line only handled around 12,000,000 bushels. However, even on this meager tonnage, the saving to the farmer of around 6 per cent per hundredweight, as against the all-rail rate to the seaboard, aggregated close to \$500,000—which sum represents 5 per cent interest on \$10,000,000. Given the elevator facilities as herein contemplated and the annual savings to the farmers would mount up to many millions.

Modern elevators of the concrete type are permanent structures, that do not have to be rebuilt every year—whereas, the loss to the farmer, where he cannot avail himself of this low cost water haul, is of yearly occurrence. It may represent to him the difference between success and failure.

The customary schedule of rates for elevator service would carry the investment, and the Government would receive an extra and a worthwhile dividend by having a more prosperous and a more contented husbandry. The farm and the factory,

while both are industries, yet differ radically in that if conditions arise which make it expedient for the factory to be located at tidewater rather than in the Mississippi Valley, the manufacturer can abandon his old location and remove his productive machinery bodily to Bridgeport, for example, to which point quite a number of mid-western factories have already been removed, either in their entirety, or as branches. Not so, however, with the farmer. The soil is his factory—and the soil is very much of a fixture. Therefore, if the farmer is to avail himself of changed conditions, the machinery for that relief must be set into motion within reach of the farm. The Mississippi River system of line elevators would be the power house from which that relief could be most easily transmitted.

We have been improving the Mississippi River, so as to bring an arm of the sea as near as possible to the farmer's door. But to make that river serviceable we must not only supply the boats and barges, but we must also supply the dock and terminal facilities that are essential to the successful operation of that floating equipment. It's all right to daydream about "harnessing our rivers," but this presupposes some vehicle to hitch the traces to, and some load in that vehicle to be pulled—not an empty, but a loaded barge. And the grains that are brought to the river bank by the rails and the trucks can only be transferred to the barge through the medium of a grain elevator. A string of such river bank elevators is an indispensable part of that river work-harness.

of merchandise. Eight tracks, covering the area of approximately one city block, meet the shipping problem. Among the things handled at this end of the business are tobacco and automobiles. The house is operated under the United States Warehouse Act, and was bonded for 802,000 bushels prior to the completion of the new unit. A general distribution business, including the operation of trucks, is also being done.

As will be seen from the illustration on this page, the Nashville Warehouse & Elevator Corporation has a thoroughly up-to-date and compact group of buildings, which are kept in the best of repair and the equipment of which is also kept up to a high mechanical standard. The officers of the corporation include S. M. Allen, Jr., president; Joseph W. Scales, manager; and T. F. Squires, secretary.

The business is an old established one, and with the prestige already strengthened among the members of the local grain trade, there is no reason to doubt that the company will experience little difficulty in getting adequate use out of the additional storage just built. No expense was spared in securing a first class structure.

Grain Business Grows—Adds Annex

Nashville Warehouse & Elevator Corporation Adds 360,000 Bushels of Concrete Storage to Its Large Plant at Nashville, Tenn.

ONE of the most important of the large grain elevator additions in the South during the last year has been the erection of a series of new reinforced concrete tanks for the Nashville, Warehouse & Elevator Corporation, at Nashville, Tenn. The new unit has slab, walls, conveyor gallery and trestle all of reinforced concrete and was completed within the last few months. It represents an annex to the old house which measured 125 feet in length and 50 feet in width, and is 137 feet high.

The buildings are so situated that they give direct access to both the Louisville & Nashville Railroad and the Nashville, Chattanooga & St. Louis Railroad; and the City of Nashville is so centrally located that it has good connection with numerous outlets as well as sources for grain supply in the South. The new unit of nine tanks was erected with the Stevens Engineering & Construction Company, of St. Louis, Mo., as designers and contractors.

The bulk storage of the original house was 500,000 bushels of grain, and this was divided so that it gave 250,000 bushels in the wooden house and another 250,000 bushels in concrete tanks. The new unit gives additional space adequate for 360,000 bushels. The receiving capacity of the old house was 30 carloads bulk per day, and the additional space of the new unit can receive at the rate of 6,500 bushels per hour. The new tanks are for storage only, but equipment for cleaning and drying is housed in the older building. Invincible Cleaners are used and Hess Driers, and the drying capacity is 10,000 bushels per hour.

In addition to the 30-car daily bulk receiving capacity already mentioned, the elevator has a sacking capacity of 11 cars per day. The shipping capacity is the same as the receiving—30 cars per day bulk. The 360,000 bushels of the new storage are divided among nine tanks of 24 feet diameter each and five interstice bins, one of which contains the new leg. This is achieved by having two rows of four tanks each, which have three interstice bins between them, and the ninth tank is placed across center at one end of the row, thus creating the fourth interstice bin between the single end tank and the adjacent last two of the two rows. The tanks measure 115 feet from the top of the slab to the underside of the bin roof. The interstice containing the leg is located at the end opposite that which has the odd tank.

The principal power of the original unit was provided by steam, though some electricity was also used. The lighting system is electrical throughout. The steam power plant is rated at 125 horsepower, and a rope drive is used. In the new unit the power and lighting are both electrical throughout, and 220 volts of alternating current is used. Central station service is the means of affording the necessary current, and motors which aggregate 60 horsepower take care of the new tanks requirements. These motors are three in number, and silent chain drives are installed.

The original house has 10 belt conveyors, and in the new unit two more 30-inch belt conveyors

have been provided, one at the top and one at the bottom. The unloading devices are in the old house and rope pull shovels are used. Five scales, some of which are Fairbanks make, take care of the needs for weighing.

While the house did not have a thermometer system prior to the erection of the new group of tanks, the Zeleny Thermometer Company, of Chicago, has its system installed now and the exact condition of the stored grain can be accurately determined without delay and expenditure of extra time and effort. The provisions for guarding against fire are also better than average and every



NEW ELEVATOR OF THE NASHVILLE WAREHOUSE & ELEVATOR CORPORATION, NASHVILLE, TENN.

modern precaution has been taken. There is a sprinkler system and the city pressure is adequate to hook up with the plant's own equipment. Tennessee district boxes are also part of the scheme of protection.

In the original house, the chief products handled were wheat, corn and oats, as well as sacked seed grains; and it is expected that the new unit will add materially to the needs for added storage space for wheat and oats especially. Practically all kinds of merchandise not of a perishable nature have been and are being handled by the company, and some idea of the quantity of grain handled last year may be gained from the fact that the house took care of 4,300,000 bushels of principally wheat and corn last year.

There is a warehouse capacity for 400 carloads

other lines of business also made imperative a large increase in locomotive units. For this purpose, and to replace old equipment, 517 locomotives were placed on order August 1.

PORT HOUSE PROFITABLE

Port Houston's new grain elevator, during August and the first two weeks of September has continued to show a profit comparable with the showing made in July. In that month, the first audited period of operation, expenses of the elevator amounted to \$6,585, while its revenue was \$8,713. Ordinarily, the City of Houston derives its greatest revenue item from its wharfage facilities, but among the port facilities there in July, the elevator was the largest income producer.



Published on the Fifteenth of Each Month

BY

Mitchell Brothers Publishing Co.

OFFICE:

**Manhattan Building, 431 South Dearborn St.
CHICAGO, ILL.**

A. J. MITCHELL.....Business Manager

Subscription Price - - - \$1.00 per Year
English and Foreign Subscription 1.75 " "

ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

Official Paper of the Grain Dealers National Association and of the Illinois Grain Dealers Association
CHICAGO, ILL., SEPTEMBER 15, 1926

FIRE AND SMUT PREVENTION

WHICH is greater, the grain trade's loss from fire or from smut? With Fire Prevention Week (October 3 to 9) in the offing, the question seems especially pertinent, although fire and smut are subjects that should be of all-year-around importance. Without attempting to analyze the loss reports of tens of millions of dollars charged to either source, it is significant that during 1925, the insurance companies' reports show that the fire menace is being curbed. Loss from smut is still an emergency matter however.

From every part of the wheat raising sections of the country come the complaints of stinking smut ravages. We seem to be in need of a smut-prevention week as much as a fire-prevention week. Nebraska farmers are on the verge of fall sowing. Other districts soon will be ready for seeding. Talk to the farmer customers now

AN ICE-BOUND PLAN

PORT NELSON on Hudson Bay seems almost infinitely far away if you have never been there. As the crow or aeroplane flies, it is 1,500 miles from Chicago. But they are cold miles, and geographers insist on bringing in the good old phrase "barren, frozen waste" when touching on the subject of this Bay District. Therefore, there has always been a touch of the incongruous to some grain men, in the scheme of the Canadian Government to build a railroad to Port Nelson and send the wheat of the Northwest to Europe via the Hudson Bay and strait.

It will be remembered that the project was advanced considerably before the World War. Now the progress has been renewed by the request of the Canadian Minister of Railways. He has suggested \$3,000,000 as the sum that will put the road in running order within 92 miles of Port Nelson, while another \$3,000,000 will close up the gap and bring the railroad to the waters of Hudson Bay.

Canadians seem to be in earnest about this, for they talk about spending, beside the \$21,000,000 already spent and the \$6,000,000 now proposed, \$20,000,000 more to build elevators and docks and harbor works. Criticism of this project, after it has a \$21,000,000 start, seems a trifle late, yet there is an increasing number of critics who maintain that it is possible to enter and leave Hudson Bay only in the summer season. Others say that there is serious doubt whether grain can be shipped at all from Port Nelson after the Canadian wheat crop begins to move in the fall. Facing these icy suggestions, the Hudson Bay wheat shipping project's main appeal is as a grain trade adventure.

"THEIR" GRAIN

COUNTRY shippers and terminal men owe so much to railroad pioneering that it seems like attacking an old friend to say that railroads are depressing the grain trade. Their rates are not to blame. It is their attitude toward Mississippi River transportation. A paradox of this attitude seemingly is offered by the splendid Missouri Pacific Railroad Elevator on the St. Louis waterfront. That house is so located, however, for the reason that St. Louis is the big terminal point on the line.

The railroads that serve the grain belt on the Mississippi between St. Louis and St. Paul all cross but do not end on that river. All terminate at Chicago. However, the main line crossings of this river, such as at Dubuque, Savanna, Clinton, Rock Island and Burlington, are division points for these granger roads, where they have extensive shop and yard facilities. Nevertheless, all rates break on the Mississippi. Therefore, from both an operating and a traffic standpoint they are well equipped to efficiently serve the storage elevators that may be located at such division points.

These granger roads will not look kindly upon any plan to stop "their" grain at newly created markets on the Mississippi. Inasmuch as this traffic has originated in the back country along their rails, they claim the privilege of hauling it the full length of their rails. They do not wish to take any chances that any part of "their" grain may be diverted to the barge line, even though they must admit that such diversion, as against the all rail movement to Chicago, will result in a saving to the farmers of around six cents per hundred weight on "their" grain.

This idea of it being "their" grain is poppycock. It should be treated as such by the administration at Washington, D. C. The grain belongs to the farmer and the grain dealers who buy it. Continued paralysis of river shipping is inexcusable.

RIVERSIDE GRAIN STORAGE, A MAGNETIC IDEA

ERECTION of huge elevators at Mississippi River crossing points is necessary if the grain trade above St. Louis, Mo., is to receive any benefit from the Federal barge service. If they are to operate successfully, barge lines must be surrounded by the same storage and terminal facilities as are the railroads.

H. W. Seaman, member of the Inland Waterway Corporation's directorate, concludes that the Government should build these elevators and operate them. Briefly, his case, as submitted to Secretary of War Davis and as explained by him on Page 144, is:

The Mississippi River and its navigable tributaries, the Ohio, Missouri and Illinois, penetrate the principal grain growing area of the nation; and, this entire system is scheduled by Congress for navigation within at least five years hence; and

The main stem of the system, i.e., the Mississippi proper from Minneapolis to the Gulf, is now being navigated by the Federal Barge Line, and one of the big items of its logical traffic is to assist the railroads in moving the exportable surplus of grain that is destined to leave the farm; and

In order to function in that regard, the farmer, the water carriers and the railroads must have storage elevators at strategic river-rail crossings; and at present no such facilities are available; and

Until a practical demonstration has first been made private capital will not be forthcoming to provide such storage facilities, the absence of which will cause an enormous loss of from four to six cents per bushel to the farmer; and

Congress has committed itself to the broad national policy of saving the farmer from such loss, and the aforementioned comprehensive storage elevator plan commends itself as an integral part of any such policy.

It is predicted that the riverside storage plan is a magnet which will draw many farm bloc leaders to it in the next Congress. That certain of the railroads will oppose it, is a foregone conclusion. On what grounds others can oppose it, it is difficult to see, unless it is on the good old objection—Government control.

But there will be no Government control. There will be Government operation. There's a difference. The elevators proposed would be neutrals. The business of private grain dealers, co-operative groups, and railroads would be handled without discrimination against any of the interests involved. Mr. Seaman, whose home is on the Mississippi River, at Clinton, Iowa, is part of the year a resident member of Chicago's most conservative club, the Union League; he is a banker, lawyer, and business executive, and he expresses regret that he must go on record as advocating Government elevators. After two years of studying the problem, however, he is convinced that it is the most acceptable alternative. We sympathize with him. We agree with some of his conclusions. We solicit criticisms, adverse or favorable, for publication next month.

WICHITA'S ELEVATOR BOOM

PLANS are under consideration for the erection of between 3,000,000 and 5,000,000 bushels of additional storage space for wheat in Wichita, Kan. If each of the

projects is carried out, that market will witness the doubling of its grain storage capacity before the expiration of the present crop year. Wichita now has a wheat holding capacity of 5,000,000 bushels.

Elevator companies, mills, and at least one railroad are making the plans. Decision to put up at once storage facilities for 2,000,000 bushels has been definitely reached. The enormous early new wheat movement resulting from the use of combine harvesters is proving to be a tremendous stimulus for elevator building in many cities. Wichita is only one of the points at which a doubling of storage facilities will be made to allow for the 1927 crop.

EDITORIAL MENTION

The all-American gold medal for carelessness should go to the elevator which has a fire the week of October 3. Fire Prevention Week starts on that day.

The cost of operating state governments in this country has more than doubled since 1917. But we should be thankful that, Federally, we have no grain export corporation to support.

Captain O'Hay, soldier of fortune, will furnish part of the entertainment for the grain men convened at Buffalo. His name should prove an eye-catcher for hay dealing grain dealers.

Barges carried 1,000,000 bushels of grain from St. Louis to New Orleans in a recent 30-day period. With discriminatory rail rates in effect, the barge may be the salvation of the New Orleans trade.

Ohio rains have taken a 5,000,000-bushel toll from the oat crop. Wheat has been the favored grain in the Buckeye State this year, with the highest yield per acre in the history of that commonwealth.

The fact that Diesel engines are extremely quiet, and devoid of the smoke nuisance, is a feature not to be overlooked by the elevator operator whose plant is located in a thickly settled metropolitan district.

New Orleans continues to make a small showing in exports of wheat, Galveston and other Texas ports getting the bulk of the southern business. In August 656,424 bushels went out from the Crescent City. Twelve months ago, twice that much left.

Canadian grain pool operations are still major mysteries to many grain dealers. W. Sanford Evans, of Winnipeg, is to discuss the northern pools at Buffalo on October 19. First hand information from the Dominion will be appreciated. If Mr. Evans tells all he knows, his speech will be a convention feature.

Five tons of mail can be carried in addition to 100 passengers in a new American airliner. This 15-ton capacity airship is the giant among

sky craft today, but it would take just 2,000 such aerial carriers to transport the same amount of grain that a single 3,000-ton river barge can carry. The day of the aerial grain ship is remote.

Diesel engines are cutting into the business of central electric service stations from coast to coast. The case of one Minneapolis elevator concern, for instance, is one of thousands of cases of obvious saving in power cost. Diesel power has cost this company \$5,000 per year less than steam. On the best contract they could secure for purchased power, the saving would have been \$7,000 per year.

A Canadian named Diener, who has been experimenting with wheat for many years, is alleged to have produced a new variety whose grains are larger and harder than the best of regular northern wheats, and which will give enormous yields per acre. Whole fields yield 50 bushels to the acre and special plots have given a harvest of 150 bushels. Diener should be photographed with his fish.

When you consider that the best grain land in Argentina can be had for \$28 per acre, farm labor for from 30 to 50 cents a day—when you further consider that the rate on grain from Argentina ports to Liverpool is 10 cents per hundred weight lower than the rail rate from our grain belt to New York City (to say nothing of the ocean freight charge to Liverpool), it is amazing that our grain export surplus stands the gaff of competition as well as it does.

At the risk of being accused of handing out a stereotyped slap on the back, we assert that President Horner and Secretary Quinn, of the Grain Dealers National Association, deserve credit for building up one of the most attractive national convention programs in decades. George B. Wood, W. J. Heinold, C. C. Lewis, E. E. McConnell, and Frank C. Greutker are prominent among the Buffalo hosts to whom the dealers will also owe thanks during October 18 to 20.

Saturday reports are no more. This change in the Government's crop reporting service has been approved by Secretary of Agriculture Jardine. W. F. Callander, chairman of the Crop Reporting Board, announces that the general crop forecast, previously scheduled for release at 3 p. m. on Saturday, October 9, will be issued Monday, October 11. Objection has been made to the issuing of crop reports late Saturday, and upon the advice of grain trade experts, the change is now effective. Another report is planned for Friday, December 17, in place of the one originally slated for the following day. The change will be welcome, especially on the trading floors.

The Farmers Co-operative Commission Company of Wichita, Kan., wants to have its cake and eat it. It wants to belong to the local board of trade, but does not want to abide by its rules. When the grain commission concern was admitted to membership in the exchange, it subscribed to the rule forbidding rebates or

division of profits with the farmers. Then the farmers' union secured the passage of a state law prohibiting grain exchanges from excluding co-operative concerns practicing rebating. After this the commission company proceeded to share its commissions with its country shippers. The Board retaliated by excluding the company from membership. The ensuing contest has resulted so far in the co-operative being upheld by the state's Supreme Court. The Board is now appealing to the United States Supreme Court, and the reversal of the lower court's decision which is looked for, will establish a precedent of national significance.

With wheat exports to run from five to six times those of any previous year, Seattle, Wash., is definitely taking her place as the greatest grain port on the Pacific Coast of the United States. From July 15, to September 3, 1926, a total of 1,500,000 bushels of wheat was loaded out from Seattle docks. This amount exceeds the total of all of last year. This has been accomplished by the adjustment of elevator charges that overcome the rail grain rate differential of 10 per cent in favor of Portland, Ore.

In response to advertisements of the Canadian Government, several hundred harvest hands crossed the international border from the United States on September 1 and 2. But until the last few days, difficulty has been found in obtaining enough help. Winnipeg business men, in some cases, allowed their white-collar workers to be drafted. Three thousand men have been at work in Manitoba, and an army almost five times that large in Alberta and Saskatchewan. The general use of the combine may disperse these harvest regiments in future years.

Much attention has been attracted by the brightly painted locomotives which the Southern Railway System is putting in service to pull its fast through trains. Virginia gold and green, believe it or not, is the color scheme ordered for 113 of the steam giants, part of which are now delivered and in operation. Perhaps we will live to see the grain and grain products going back and forth between Denver and Chicago, for instance, being hauled on the "Red Ball" (the Rock Island's crack freight train) by a locomotive appropriately painted in crimson.

The production of corn syrup, oil, and starch is on the up-climb. Last year the value of these products made in this country was \$132,873,000, representing a 14 per cent increase in two years. These products comprised 1,144,858,000 pounds of corn syrup and admixtures, valued at \$41,275,000; 580,370,000 pounds of corn sugar, appraised at \$19,505,000; 101,641,000 pounds of corn oil, valued at \$14,093,000; 873,540,000 pounds of starch valued at \$34,900,000; 33,300 tons of corn oil cake and meal, valued at \$1,317,000; 522,000 tons of stock feed, worth \$17,394,000, and other products valued at \$3,849,000. It is often said that corn product plants absorb but a small part of our corn crop. However, they absorb a very substantial portion of the crop surplus that remains after farm feeding needs are met.

ED. K. SHEPPERD
Indianapolis

NEWS OF THE TERMINAL MARKETS

WM. N. ECKHARDT
Chicago

BUFFALO PLANTS ON N. Y. CONTRACT

The number of Buffalo elevators, licensed as delivery houses on the contracts of the New York grain exchange, now number five. They are the Concrete Central Elevator, the Electric Elevator, Connecting Terminal Elevator, Superior Elevator, and the American Elevator.

WANT N. Y.-CHICAGO RECIPROCITY

With the installation of trading in bids and offers, variously known elsewhere as puts and calls, or ups and downs, the machinery of the New York City grain pit is almost complete. But it is pointed out that it lacks one important essential. Chicago does not quote New York futures. New York pays the whole sending cost for Chicago quotations; so does Kansas City, Minneapolis, Winnipeg, and other markets.

Chicago, it is said, would probably pay half the cost of sending in New York quotations, but will not accord New York reciprocity. Friends of the New York market within the Chicago Board of Trade do not hesitate to say that more could not be expected until the New York market has broadened. This it is expected to do. Traders in the eastern pit are divided on the question of service cost, but have no doubt as to the necessity of the Chicago Board publicity service itself.

SPLIT IN TRADE COMMISSION CAUSED BY GRAIN FUTURES REPORT

The pit is a necessary evil. That is the six-word equivalent of the Federal Trade Commission's seventh formal report on grain futures trading. Approval of the pit as a necessary institution is given by the Commission, but with this qualification: "The principal cost of future trading is the general social cost of the vice of gambling as it relates to futures."

Commissioners Thompson and Nugent disagreed with the majority who prepared the report on the ground that it does not afford adequate remedies for conditions alleged to exist in the Chicago Board of Trade. Among the recommendations made are:

1. Further study of market "evils" rather than immediate legislative action.
2. Registration of all persons who deal on the wheat exchange, with a view to curbing gambling as opposed to legitimate hedging.
3. Exclusion from the market of all those without technical skill in grain operations.
4. Discouragement of short selling. "The plunger variety should be frowned upon because of its effect in smashing prices."
5. Public audit of grain brokers' books, and closer scrutiny of brokers' operations.

It is estimated in the report that between \$20,000,000 and \$25,000,000 are spent annually in commissions for pit transactions. Losses and gains in speculation in grain futures are placed at "several hundred million dollars a year." Twenty billion bushels of grain exchange hands in the Chicago pit annually, and during active markets 11,000 persons buy and sell, says the report.

By a coincidence, the Commission's demand for self correction by the exchange came upon the heels of the announcement that the Armour Grain Company was scheduled for trial by the exchange directors for alleged violation of board rules.

Leveling its aim first at gamblers, then at amateurs, and finally at unethical brokers, the majority of the Commission says:

The practical lesson from the study of the situation is that more attention should be given to the elimina-

tion of the purely gambling element from the grain market.

The demonstrably incompetent ought to be excluded from the market, both for the sake of themselves and for the sake of the market, but it is especially the correct functioning of the market that should be emphasized.

It is highly desirable, without tying up cash unproductively, to prevent the broker's employment, to the margins intrusted to him either in speculative ventures of his own or in granting credit to other speculators.

Customers' deposits might well be safeguarded by public audit and other necessary regulation.

"The correct functioning of the market often suffers from its domination by large traders—the plunger, the cornerer or the powerful elevator interest," conclude the majority commissioners.

NEW YORK'S MAN OF THE HOUR— AXEL HANSEN

In the midst of all the celebration and congratulation incident to the actual resumption of trading in grain futures on the huge floor of the New York



AXEL HANSEN

Produce Exchange, those really in touch with current affairs found time to extend hearty felicitations to the man who, with all due respect to his able and willing committee, was largely responsible for the final triumph. Axel Hansen was the man to appear when the right man was needed to do something which many others had wished for but had deemed impossible; and so, it is not strange that some call him "The Man of the Hour" in the New York grain trade. As so often the case under such circumstances, one of the first reactions of those meeting him for the first time is that he is a comparatively young man to have accomplished so much; and yet, although he is only 41 years of age, Mr. Hansen has had a wide experience in the grain trade, so that he is well acquainted with its requirements and peculiarities, not only from a domestic, but from an international stand-point. About 20 years ago—just when passing from youth to manhood—he started in the grain business in his native land, Denmark, and to the knowledge of the importing business gained there he added the wider knowledge gained by seven years in Russia and a shorter period in Belgium. Evidently believing in the broadening effect of travel, Mr. Hansen then came to America, which evidently impressed him so

favorably that he became a naturalized citizen. His first connection with the grain trade here was with the Armour Grain Company in Chicago. After that he went to Canada where he went into business on his own account in Winnipeg and also acted as Canadian representative of the Armour Grain Company for a time. Coming then to New York, he started the Hansen Produce Company in 1917, becoming one of the active figures in the grain and produce markets on the Produce Exchange. In recognition of his energy and experience and his active interest in the affairs of the Exchange he was appointed to serve on various committees and is now a member of the Board of Managers. As chairman of the Committee on Grain Futures, which was appointed this year, he did his full share in all the necessary preliminary work and in addition represented the committee and the Exchange in Washington where he met the various officials whose approval was necessary before the success of all the preparatory work was assured. Mr. Hansen modestly states that the great success of the whole project was due first to the fact that he had a very good committee, "possibly the best that could have been selected", and secondly to the fact that all the officials whom he met in Washington were in favor of the proposition, and hence he experienced no difficulty in securing their formal approval.

ARMOUR OFFICIALS ACQUITTED

The Directors of the Chicago Board of Trade on September 7, heard the charges brought by the Business Conduct Committee against the Armour Grain Company, that the Armour concern had run 5,400 bushels of screenings into a bin containing 20,000 bushels of rye last April without the supervision of an inspector. The alleged mixing was discovered by James Noble, chief of the Board's Grain Sampling Department. Two special investigating committees had been appointed and had reported without recommendation before the directors considered the case themselves.

About 20 witnesses were called, including some 15 members of the grain company, but it was found impossible to fix the blame upon any member of the company, and by a vote of 15 to 1 the directors of the Board exonerated the Armour Grain Company of the charges.

It is understood that the exonerating decision did not mean that the screenings had not been transferred from a private to a public elevator, but that the grain had never been sold and that therefore there was no transaction and no money was lost to any one by the action.

VOLUME OF GRAIN FUTURES TRADING IN AUGUST

Trading in futures in August on the Chicago Board of Trade was considerably less than in July and also less than in August of last year, according to the report of the Grain Futures Administration. The total for all grains for the month was 1,567,524,000 bushels, as compared with 1,821,240,000 bushels in June, and 1,892,696,000 in July 1925. The total of July trades in bushels was divided as follows, and for purposes of comparison the total for each grain for June is given in parenthesis: Wheat, 1,014,634,000 (1,236,527,000); corn, 408,231,000 (418,045,000); oats, 110,388,000 (94,767,000); rye, 34,271,000 (71,901,000).

The average open contracts in futures at Chicago in July, on the "short" side of contracts only, were: Wheat, 99,118,000, compared with 87,023,000

in June and 95,564,000 in July of last year; corn, 53,654,000, as against 52,196,000 in June and 51,403,000 in July 1925; oats 42,730,000, compared with 31,397,000 in June and 43,652,000 in July last year; rye 13,014,000, as against 12,393,000 in June and 10,929,000 a year ago in July.

INDIANAPOLIS CORN CASE ENDS

E. H. Bingham, H. W. Reimann and Frank G. Coe composed the Arbitration Committee of the Grain Dealers National Association that has awarded the Bingham Grain Company of Indianapolis, Ind., a claim of \$153.37, in the latter's case against the Carpenter Grain Company, of Battle Creek, Mich. The case involved two cars of corn (out of a 5,000-bushel order) which were received hot. They were accepted subject to arbitration.

SOME SIDE COMMENTS OF THE NEW YORK PIT TRADERS

Some members of the New York Produce Exchange have not been slow in declaring their disappointment over the fact that they did not immediately draw in a huge volume of outside business. This heavy outside trade will eventually come in, it is the almost unanimous opinion, because of the large proportion of actual export shipping business, including chartering, which is done on the floor of the Produce Exchange.

"If," said one of the younger and less patient members the other day, "we are as sure as we have been slow, we need not worry. It has taken Chicago a year and a half to get into the cotton futures trade. At the start it was not half sure that it ever would." On the whole it is clear that pessimism in the New York pit is outweighed by sane optimism.

WHEAT FIRM AND ACTIVE AT INDIANAPOLIS

Our market has been very firm and active with a good demand for all grades of wheat, particularly the lower grades which have been in large measure the total of our receipts. There is a sharp call for good milling wheat and the tables are cleaned every day.

There is an extra good demand for good Yellow corn, other grades are selling readily at very reasonable discounts compared to some of our neighbors. Oat receipts have been very light and the demand has been sufficient to make a good market for all that have been coming.

As we view the situation, any grain consigned at this time would meet a good market as there is no indication of receipts sufficient to overreach the call that is coming in daily. Of course the general market has been strong recently on account of the unfavorable weather conditions both for oats and corn and we note that there is still considerable wheat unthreshed that will probably be in very poor condition if it is ever threshed.

We doubt, however, that this will affect sufficient wheat in the aggregate to offset the increased movement for the Northwest and are not especially strong on the future of wheat prices.—*Market Letter of September 11. H. E. Kinney Grain Company, Indianapolis, Ind.*

RAIN DAMAGES SMALL GRAIN CROPS

The Peoria market for corn has been ruling relatively well as to values as compared with other markets. The arrivals for some time have been moderate and many days very light. The industries here that are now using about 70,000 bushels daily have needed all the corn that could be brought here under the distressing weather conditions that have prevailed throughout the country, especially tributary to Peoria. There has been a fair demand for the No. 2 grades to go to elevators, though the real shipping demand east and south has been practically nothing, indicating that we are out of line for shipment so far as prices are concerned.

The unusually rainy weather for the past month has done a great damage to the small grain crops, much of which remains in fields in shocks that are rapidly deteriorating.

The arrivals of oats here so far have been mostly very poor hot sample grade, though there has been

a moderate proportion of No. 4 White (not much better than Sample) and some No. 3 White, and occasionally a car of No. 2 White. Values here have corresponded very well with those ruling in other competing markets, and while the threshing was in progress we got a fair share of them.

We have concluded that the general situation in oats is a firm one, and in spite of what public reports of September 1 revealed, we believe when another Government report comes out that there will be a still further large reduction in the total crop. Practically the whole oats belt of Illinois did not have to exceed half crop to begin on, and the rain has destroyed a large portion of the value of what remains unthreshed. We believe the movement of oats in Illinois for the next six months will be perhaps the lightest known in recent years, and that there must be a substantial advance in prices.—*P. B. & C. C. Miles, Peoria, Ill. Market Letter of September 11.*

NEW WAREHOUSE CORPORATION PROPOSED

Through the leadership of John R. Mauff, former executive vice-president of the Chicago Board of Trade, a plan has been formulated to establish a corporation, under control of the Board, to operate Class A public grain warehouses, so that these



JOHN R. MAUFF

warehouses shall not have any connection with private warehouses through interlocking ownership.

A form of contract has been approved by the Directors of the Board which provides that the Public Warehouse Corporation will have a minimum capital of \$25,000, all of which will be subscribed for by three trustees on behalf of the Board. The stock will be held in trust by the trustees for an indefinite period, subject to an agreement by the terms of which the trustees will vote the stock to elect themselves directors of the warehouse corporation. One of the trustees is to be appointed by the elevator interests, one by the president of the Board, subject to the approval of its directors, and the third will be elected by the other two. It is provided that the third trustee shall be a disinterested banker.

The elevator interests involved in the proposed contract include the Export Elevator Company; the Central Elevator Company; the E. R. Bacon Grain Company; the Rosenbaum Bros., Inc.; the Postal Elevator Company; the South Chicago Elevator Company; the Rialto Elevator Company; the Armour Grain Company; the Rosenbaum Grain Corporation; and the Nye & Jenks Grain Company.

In presenting Mr. Mauff's claims to the Board of Trade directors, counsel for the former declared that, in addition to possibility of grain manipulation through the substitution of grades in making deliv-

eries, "a member with unlawful public elevator affiliations has an advantage in that he need not charge and can rebate to himself any part or all of the lawful rate of storage or other costs pertaining to the grain in storage and consequently has an unfair and unlawful advantage in competing with other members in obtaining buyers on the eastern or any other market; in other words, he is not charged with the regular public and lawful rate that pertains to other members of the Board."

Other advantages which public operators have were enumerated by the counsel as follows:

A member with unlawful public elevator affiliations has an advantage in that he has the power of appropriating certain advantages with reference to transit billing. He is enabled practically to preserve billing beyond the time of the expiratory period.

A member with unlawful public elevator affiliations has an advantage in that he can assume, directly or indirectly, priority over available public elevator space.

A member with unlawful public elevator affiliations has an advantage in that he has special facilities for the securing of information pertaining to the condition of grain in public storage, and in his control, and can use such prior and vital information to his own advantage.

A member with unlawful public elevator affiliations has an advantage in that he need not subject himself to the cost of making "special bin grain" regular for delivery on contracts.

The proposed warehouse corporation will lease elevators or bins from approved elevator companies and employees of the corporation shall operate them at a charge to cover expenses and allow a profit of 8 per cent on the capital stock.

OATS MOVEMENT DELAYED

Rains have delayed oats movement. Receipts in all markets are disappointing. Inspections this week include 10 No. 2, 57 No. 3, 5 No. 4, one Sample. A much larger percentage of low grade oats is expected. While we do not encourage shipping wet oats will handle as usual to best advantage. There is an excellent inquiry for No. 2 White oats, and they are selling at big premiums over other grades. Corn advanced chiefly due to apprehension in regard to the new crop. Cash corn has advanced over 5 cents for the week. Wheat while not in as large volume continues to move freely. The advance this week should encourage domestic buying. Cash prices are over an export basis.—*Market Letter of September 11. Southworth & Co., Toledo, Ohio.*

ST. LOUIS GRAIN INSPECTION INCREASING

Data just received from Charles Rippin, secretary and traffic commissioner of the Merchants Exchange of St. Louis, indicate that local inspections of grain at that market during the first seven months of the present year showed a decided increase over a corresponding period last year. The record is of cars which are shipped to the St. Louis market locally, and no through business is included in the statistics. All tonnage that represents cars which simply pass through St. Louis have been eliminated from the report on the theory that they do not constitute a proper item to be included in any primary market report. The comparative statement of inspections of grain for the first seven months of 1926 and 1925 follows:

	1926	1925
Wheat	13,729,358	12,432,201
Corn	14,881,086	10,039,548
Oats	9,140,000	14,400,000
Rye	129,900	29,900
Barley	217,200	390,400
Sorghums	241,200	220,800
Total	38,338,744	37,512,849

MILWAUKEE MARKET CONDITIONS CONSTANT

The same features pertain to wheat, corn, oats and rye, so a general summary will cover the situation. Receipts are running disappointingly small and our elevators and industries appear very anxious to get grain of all kinds. The movement is no doubt being retarded by unfavorable weather conditions and prices are also somewhat disappointing to the farmers. It is noticeable during the past few days that discounts for low grade grain are much smaller than heretofore and there is also some indi-

cation that grain from now on will be in better condition for marketing. We feel confident that this market will afford a very good outlet for all kinds of grain for some time to come.—*Market Letter of September 11. E. P. Bacon Company, Milwaukee, Wis.*

THE HIGH COST OF CLEARING

As if to substantiate the claims of some members of the Chicago Board of Trade that the present clearing house system is too expensive, a statement of the expenses of the new system show that more than \$70,000 was paid out in operating expense since February 1 or a period of six months. The old system was operated at a yearly cost of approximately \$19,950. Recently the clearing house has curtailed by letting out several high priced clerks.

CORN DISPUTE SETTLED

If either party to a contract fails to object to the terms of a confirmation order received by them, as required by the rules of the G. D. N. A., neither party may claim that any clauses contained in such confirmation are null and void. That is the decision arrived at after an arbitration of a complaint filed against E. T. Custenborder & Co., Sidney, Ohio, by the Bingham Grain Company, Indianapolis, Ind. The plaintiff was awarded \$128.94 by Committee No. 2 of the Grain Dealers National Association of which E. H. Bingham, H. W. Reimann, and Frank G. Coe were members. The dispute centered over the sale of three cars of corn.

CINCINNATI MARKET STRONG FOR GOOD GRADES

Cincinnati has had light receipts during the past week. They were made up mostly of off grade wheat, with some No. 4 and Sample oats. Most of the oats are grading No. 3 White.

Corn receipts are insufficient to meet with demand. This has been reflected in considerably stronger prices during the last day or two.

Wheat, corn and oats of good quality are in demand. Poorer grades are wanted, but at much lower prices. Discounts are narrowing on off grades. Number 1 wheat and No. 2 oats are in urgent demand.—*The Early & Daniel Company, Cincinnati, Ohio. Last minute letter.*

SEATTLE AMENDS RULES

The Merchants Exchange Clearing House of Seattle, Wash., has made the following amendment to the Trading Rules, Contract Grades and Deliveries:

Effective September 1, 1926, beginning with a May option, and affecting all future contracts thereafter. Section 2 is amended to read as follows: "Contract grades shall be: Basis No. 1 Western White, and/or Soft White, and/or Hard White."

Section 3 amended to read as follows: "The following grades of wheat shall be accepted on contract at a discount of 3 cents per bushel."

Basis No. 1 Dark Northern Spring and/or Northern Spring and/or Red Spring, and/or Dark Hard Winter and/or Hard Winter and/or Yellow Hard Winter, and/or Western Red.

No. 2 and No. 3 wheat shall be accepted on contract at the regular Merchants Exchange discounts and differentials.

Wheat taking a grade lower than No. 3 is not applicable on contract.

MARINE NEWS FROM ILLINOIS

September weather, past, present and future is principal topic discussed now in farm and grain circles. First 10 September days gave Decatur 10 inches of rain. Some Illinois points had around eight inches in 24 hours. The main line of Wabash Railway between here and Quincy has been out of commission for past 72 hours. Some hard roads out of commission for 24 hours, Route 10 east of Decatur, under water in 10 places within 15 miles, 100 yards in one section was under 18 inches of water.

Many corn fields on level prairie lands stood in water for days; of course corn on bottom lands mostly washed out, one can smell it fermenting from the roadway. Luckily these rain storms were seldom accompanied by heavy winds and there is less corn lying on the ground than one would expect.

Of course this August heat and September moisture have made very good looking ears on most stalks.

It is also true that farm reserves of old corn are unusually large, but at the same time, held on to pretty tight by the growers, many of whom feel as we do that the crop is late in maturing and with present prospects for early frosts, which would further reduce the yield from the Government estimate published on Friday last. Grasses of all kinds show a luxuriant growth.

Indications are that farmers would like to put in a larger acreage of wheat than last year, but have so far been handicapped by wet weather, from breaking up as much ground as desired. Some oats will not be threshed, probably these \$14 hogs will be turned in on those grassy shocks yet in the field.

Values here. No. 2 White corn 77½ to 78½; No. 3 White corn 76½ to 77½; No. 2 Yellow corn 77 to 78; No. 3 Yellow corn 76 to 77; No. 3 White oats 34½ to 35.—*H. I. Baldwin & Co., of Decatur, Ill., in letter of September 11.*

WESTERN COMPANY ELECTS NEW OFFICERS

The new officers of the Globe Grain & Milling Company selected at a special meeting of the Board of Directors held at the company offices in Los Angeles, July 29 are: O. H. Morgan, president; J. B.



PRESIDENT O. H. MORGAN

Alexander, vice-president; C. C. Hine, vice-president; and John R. Goodwin, secretary and treasurer.

Mr. Morgan succeeds Will E. Keller, whose retirement was announced at the annual stockholders' meeting held two days before. Mr. Morgan has been with the Globe company and its predecessor, the McDonald Grain & Milling Company, since July, 1898, and his election to head the company came as a logical recognition of his ability and qualifications. From his earliest connection with the organization he displayed marked ability and moved steadily upward to the important post of vice-president and general manager, which he has held for some years past. In this position he was a prominent factor in guiding the company through the trying days which the milling industry encountered in the years immediately following the war and enabling it to gain the favorable position it enjoys at present.

J. B. Alexander is one of the founders of the company and continues in an office which he has held for many years. He is also a director of the company and is prominently connected with several other California companies in other lines. Mr. Hine is a new officer of the company who has come up from within the organization. His period of service with Globe dates back 17 years, the past three of which he has been director of sales. His name was also added to the Board of Directors. John R. Goodwin moves up from assistant secretary and treasurer, succeeding A. D. Buckley.

The Globe Grain & Milling Company operates six mills, five of them in California, at Los Angeles,

San Francisco, San Diego, Sacramento and Colton. The sixth mill is in Ogden, Utah. Manufactured feed plants are operated in Los Angeles, San Francisco and Ogden. More than 40 offices and warehouses are necessary adequately to handle the business, which runs into several million dollars monthly. The chief brand of the company is Globe "A1," which is applied to both flour and feed. Capital and undivided profits are nearly \$12,000,000.

The new leaders are all men who have long been with the company and possess unquestioned qualifications for their duties and there is no doubt but that the Globe will continue to enjoy a prosperous growth.

DEMAND STRONG FOR HIGH GRADES

Ed. K. Shepperd of the Cleveland Grain & Milling Company, Indianapolis, Ind., writes us, under date of September 11: "We have been having an exceptionally good demand for good Soft Red wheat of milling quality, but off-grade wheat containing a large per cent of damage has been selling at pretty sharp discounts. We are rather anticipating a few shipments right along of this off-grade wheat and can hardly expect it to sell much better in relation to good wheat than it has been.

"Our receipts of corn have not been very heavy, with the result that we are having an excellent demand for White and Yellow corn but rather an indifferent demand for Mixed corn. Off-grade corn containing a large per cent of damage is selling on a better basis in relation to the graded corn than it was some time ago.

"Receipts of oats have been very light, but it is surprising in view of the very unfavorable weather for threshing to note the large per cent of oats coming into this market grading No. 3 White. There is a good demand for them and they are selling well. There is only an occasional car of oats, however, grading No. 2. The last car of oats in this market to grade No. 2 sold at 7 cents premium over No. 3 White oats."

CHANGES IN MEMBERSHIP

Chicago.—The following memberships on the Board of Trade have been transferred: Philip J. Wegeng, Riley E. Pratt, Alfred G. Kay, John J. Fleming, Daniel H. Andreae, Estate Hugh Blythe, John P. Benkard, Edwin H. Ivey, Ralph Van Vechten, Frank H. Becker and Estate James W. Booth. Memberships have been granted to: Edgar L. Rickel, James D. Hill, Ralph S. Richards, John C. Pitcher, Thomas K. Christie, Wm. F. Burrows, Jr., Leslie Ravenscroft, Martin H. Milek, James R. Leavell, Thomas E. Hanley, Jr., and Robert Webster Booth. Reported by Secretary James J. Fones.

Duluth.—The following were elected to membership on the Board of Trade: P. H. Fuller, J. J. McAuliffe, E. S. Westbrook and J. K. Cook. The following have withdrawn their memberships on the exchange: A. A. Jewett, W. F. Converse and J. W. McCulloh. Reported by Secretary Charles F. MacDonald.

Memphis.—W. E. Richmond & Co., and the Thomas Feed Company are new members in the Merchants Exchange. Reported by Secretary N. S. Graves.

New York.—New members on the New York Produce Exchange are: Arthur W. Cutten, whose application was made through E. F. Richards of Jackson Bros. & Co.; Frederick L. Peisach, Prentice Strong, Alfred Fisher, Joseph A. Wade, Louis Costa, Peter Boyne, J. Frank Graham, James W. Lee, Walter N. Wiemann, Alphonse S. Rosenberg, Henry W. Sellers, and E. W. L. Stonington.

TERMINAL NOTES

The Cairo, Ill., office of the H. S. Antrim Company has been closed.

A grain brokers' office has been opened at 724 Pacific Building, Vancouver, B. C., by F. L. Davies.

Jack Norby is now at the Milwaukee, Wis., office of the Cargill Grain Company. He was formerly at Fairmount, Minn.

Harry D. Richeson is back with the Armour Grain Company, Chicago, Ill. He was vice-president of

the company but retired several years ago but the call of the game was too great for him to resist.

A. R. Templeton is in charge of the business of the Hales & Hunter Company at Minneapolis. He was formerly at Milwaukee.

A Federal grain supervisor has been appointed for Springfield, Ill. John Morthland of Decatur has received the appointment.

The capital stock of the Seaport Grain Company which operates at 817 Sampson Street, Houston, Texas, has been increased from \$10,000 to \$20,000.

W. L. Frank has been succeeded as chief grain inspector on the Sherman (Texas) Grain & Cotton Exchange by R. L. Campbell.

Another branch office has been established at Rugby, N. D., by the Midland Grain Company of Minneapolis, Minn. Marcus Smith is in charge.

Tate, Clark & Co., was formed at Memphis, Tenn., as a partnership by J. Edgar Tate and R. G. Clark. The company will handle grain products and mill-feed.

Phillip Rothrock is now divisional supervisor of the Federal Grain Supervision at New York City. He held a similar position in St. Louis until recently.

A Minneapolis office has been opened by Farnum, Winter & Co., of Chicago. R. A. Rice, who has been manager of the company's St. Paul office, is in charge.

The elevator of Bernhard Stern & Son at Milwaukee, Wis., connected with the Atlas Flour Mills, has been leased by the Cargill Grain Company. Its capacity is 500,000 bushels.

Ferdinand A. Meyer is the new chairman of the special committee of the Baltimore Chamber of Commerce in charge of freight differentials and Charles England is vice-chairman.

The interest of Strauss & Co., Inc., Los Angeles, Calif., has been bought by the Howard Brokerage Company. W. E. Howard is president and George E. Howard, secretary of the firm.

Edward C. Christl is now a member of the Milwaukee, Wis., staff of the Armour Grain Company. Mr. Christl was formerly with the P. C. Kamm Company, maltsters and elevator owners.

G. W. Anderson, who has for five years been in the sales and buying department of the L. H. Powell Grain Company of Wichita, Kan., is now sales manager for the Alton H. Smith Company.

The Wallingford Bros., Inc., has been incorporated at Kansas City, Mo., to conduct a grain business. Its capital stock is \$100,000. Earle G. and Maude M. Wallingford and H. F. Spencer are interested.

G. W. Anderson is now sales manager for the Alton H. Smith Company of Wichita, Kan. He has for the last five years been in the sales and buying department of the L. H. Powell Grain Company of Wichita.

John Trenholm is general manager of the Standard Commission Company, grain brokers of Memphis, Tenn., with offices in the Exchange Building. He was formerly with the Mississippi Elevator Company.

An amendment has been passed by the New York Produce Exchange making transferrable rates on memberships \$300. The rate was formerly \$100. This was carried by a vote of 84 for and 74 against.

An office has been opened at Portland, Ore., by the Terminal Trading Company of Seattle, Wash., with C. W. Nelson in charge. The main office will be at Portland. Mr. Thompson is in charge of the Seattle office of the company.

Ray E. Lee has been re-elected chairman of the Grain Exchange Division of the Merchants Exchange of Vancouver, B. C. W. L. Craig is vice-chairman. Mr. Lee is manager of the Alberta Pacific Grain Company, Ltd.

A rearrangement has been made by the Kansas City Board of Trade of its committees so that in the future it will have a separate Wheat Cash Sales Adjustment Committee and a Coarse Grains

Adjustment Committee. The present committee was changed in designation to the Wheat Cash Sales Adjustment Committee and a new one was named at a directors' meeting to handle adjustments on coarse grains.

Capitalized at \$5,000, the Tillery Grain & Commission Company has been incorporated at Fort Worth, Texas, to conduct a general grain brokerage business. Among the incorporators are Oscar Tillery, John Hicks and W. R. Ross.

Joe Schaber of the W. M. Bell Company of Milwaukee, was married on August 28 to Lillian Glauzen and instead of notifying the crowd on the exchange immediately by means of the customary cigars, kept it quiet until September 1.

H. C. Shaw is now associated with the Newman Bros. Grain Company of Rochester, N. Y. He has been in the feed trade for a number of years and will manage the plant of the Mystic Milling Company which the grain company bought recently.

A Minneapolis office has been opened for the Froedtert Grain & Malting Company of Milwaukee, Wis. Mack Grant, formerly with the Van Dusen Harrington Company of Minneapolis and later in the real estate business in Florida, is in charge.

A Vancouver, B. C., office has been opened for the James Stuart Grain Company, Ltd. It is to be under the management of Arnold Whitmore, late Vancouver manager of the export department of the Saskatchewan Co-operative Elevator Company, Ltd.

A silver plaque was given to Ben E. Sincere, a member of Chas. E. Sincere & Co., Chicago, by the Elks Club, as a reward for being the "largest contributor to the Elks 'Save Old Ironsides Club!'" He is the organizer and manager of the prize winning Elks band.

F. B. Willette has been made traffic manager of the St. Joseph Grain Exchange. He was formerly assistant manager of the Colorado Milling & Elevator Company, Fort Collins, Colo., and president of the Northern Colorado Traffic Association. He succeeds J. W. Holloway.

On August 16, William Estes assumed the position as chief clerk in the St. Joseph, Mo., office of the Missouri Grain Inspection and Weighing Department. He was formerly at Kansas City, office to which C. W. Gillidette, former chief clerk, has been transferred.

John Murphy is now associated with the Bartlett Frazier Co., of Chicago, Ill. He resigned his position with the Milwaukee office of the Cargill Grain Company to accept this one. At Milwaukee he is succeeded by D. L. Norby, who has been with the Cargill branch at Fairmount, Minn.

The latter part of August marked the twentieth anniversary of George R. Ruttan on the Winnipeg Grain Exchange. He came to Winnipeg in 1901 from Kingston, Ont., and for some years was with James Richardson & Sons. In 1912 he entered the brokerage business on his own account.

The Federal Court in Buffalo awarded damages to the Continental Grain Company of New York for loss suffered when grain, being taken to New York on a barge canal, was damaged by the barge colliding with a stone abutment. The court held that it was the fault of the operator of the tug and ordered damages paid.

E. W. Taylor has been elected as president of the Nye-Schneider-Fowler Company of Omaha, Neb. The other officers are H. A. Scandrett, vice-president; L. J. Thurn, secretary-treasurer. The operating division of the company is known as Nye & Jenks Grain Company with headquarters at Omaha and Chicago.

Oklahoma and Texas permits have been granted to the Davis-Noland-Merrill Grain Company of Kansas City, Mo., to conduct business in those two states. P. J. Mullin has been named as the Texas agent for the Kansas City firm, with offices at Fort Worth. The firm has a capital investment of \$10,000 in Oklahoma.

S. G. Cronin has been made manager of the Rocky Mountain Grain & Commission Company

of Kansas City, Mo., succeeding the late George W. Higby. He has been associated with the company since it opened the Kansas City office having been assistant to Mr. Higby. James A. Jackson will be assistant to Mr. Cronin. This company is a subsidiary of the Colorado Milling & Elevator Company of Denver, Colo.

John H. Manning has withdrawn from the Committee of Supervisors of Grain Inspection and Weighing on the Milwaukee Chamber of Commerce of which he has been chairman since April. He is moving to Minneapolis where he will engage in business for himself. E. H. Hiemke is acting chairman of the committee.

Fred L. Jeklin is now with the Ryder Grain Company at Portland, Ore. Mr. Jeklin has been general manager of the American Wheat Growers, Inc., with headquarters in Minneapolis. He was formerly with the Ryder Grain Company. D. J. Conway who has been in the Portland office of the Ryder Grain Company has been moved to the Seattle office.

J. W. Holloway has resigned his position as traffic manager of the St. Joseph (Mo.) Grain Exchange. He is now assistant to W. R. Scott in the Transportation Department of the Kansas City Board of Trade. Here he succeeds E. H. Tipton who resigned to become transportation commissioner of the Larabee Flour Mills Company succeeding Murray Van Metre.

The old Merriam & Millard Grain Elevator at Omaha, Neb., has been bought by the Trans-Mississippi Grain Company which has been operating it under lease. The grain firm now operates four grain elevators, the one in Omaha, the Rock Island Railway Elevator at Council Bluffs, Iowa, the Buchanan Elevator at St. Joseph, Mo., and the Burlington & Missouri River Railway Elevator at Burlington, Iowa.

At the age of 86 years, Edwin Selvage of the International Elevator Company of New York has celebrated his fiftieth anniversary as a member of the Produce Exchange of New York City. He was presented with an ebony walking stick with a gold band and tip by his friends on the Exchange. He went with the International company 45 years ago. He is a member of a number of societies and is a colonel on the staff of the commander-in-chief of the United Confederate Veterans.

A committee has been appointed by Albert K. Tapper, president of the Boston Grain & Flour Exchange, "to look after and protect the interests of the Exchange and to see what arrangements can be made to provide suitable quarters for the members and for the continuance of the work of the Exchange." The committee is composed of Herbert L. Hammond, Warren G. Torrey, Andrew L. O'Toole, Richard E. Pope and Albert K. Tapper. Members of the exchange recently voted against buying the building.

H. A. Von Rump has discontinued the grain business which he has been conducting at St. Louis, Mo., for 25 years. He began his grain career with the P. P. Williams Grain Company. He was then associated with the Seele Bros. and for the past 10 years has been in business for himself. Early in September Mr. Von Rump became associated with the Dixie Mills in the purchasing department. W. B. Christain, who has been with the Von Rump Grain Company, will be in charge of the J. C. Shaffer wire, previously operated by the Von Rump Grain Company.

THE final estimate of the corn crop for the Union of South Africa is now given by the division of economics and markets as 9,150,000 bags. The principal causes of the low yield this season have been: Lack of rain during the plowing season, lack of moisture during the growing season, cutworms, poor germination, etc., necessitating replanting sometimes as much as three or four times, serious loss through the ravages of the top grub worm, and short growing season where lands had to be replanted several times. The unit of measure is one bag of 200 pounds, and the figures given herewith are based on this unit.

TRADE NOTES

On its calendar for the month of September S. T. Edwards & Co., 110 S. Dearborn St., Chicago, well known feed system engineers and manufacturers of dried buttermilk, quote Abraham Lincoln: "Success does not depend so much on external help as on self reliance." The company has a way of quoting famous passages which bear out its own experiences for Mr. Edwards has come up through the various stages in the path to success from a small beginning to his present position.

The quantity of damp grain that is already on the way to market and in the field and the moral certainty of a large volume of high moisture corn, is creating a sharp demand for grain driers. The O. W. Randolph Company of Toledo, Ohio, makers of the Randolph Drier, reports marked activity and an immediate prospect of a large volume of new business from elevator operators who believe in putting grain in a condition to keep, before selling. Mr. Randolph states that it doesn't take long to pay for a drier in a year like this where the discounts for high moisture but otherwise sound grain are sharp.

The annual picnic for the employes of the S. Howes Company of Silver Creek, N. Y., has become a pleasant habit. The third annual affair was held at Harrysbourg on the shore of Lake Erie on August 10, and it was the most enjoyable of the series. About 300 employes of the company, with their families and friends, which included most of Silver Creek, participated. A picnic lunch was enjoyed and contests of all kinds indulged in. Mr. and Mrs. Howard Webster served ice cream and cold drinks for all and A. C. Barbeau provided cigars for the men and candy for the ladies and children. The day was pronounced a great success.

The Constant XX Century Corporation, Bloomington, Ill., manufacturers of complete equipment for grain elevators, flour and feed mills, including U. S. Corn Shellers, grain cleaners and Twentieth Century Flour Mills, have appointed the Grain & Coal Dealers Supply Company, Sidney, Ohio, their sales representatives in Ohio and southern Michigan. J. M. Bell and G. W. Donehoo, partners in the above company, have been engaged for many years in the sale of grain handling machinery and have a wide acquaintance in that territory. Twentieth Century Mills and the Constant line of grain elevator machinery have been in general use in this territory for many years and Mr. Bell and Mr. Donehoo are in position to give prompt service to present users in furnishing repairs or new equipment. Many important improvements and additions have been made to the U. S. line of grain conveying and cleaning equipment since the B. S. Constant Manufacturing Company was taken over by the present company and the Grain & Coal Dealers Supply Company is prepared to co-operate closely with the grain trade in general.

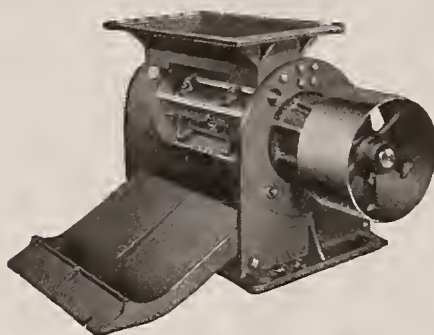
There is nothing in the way of material handling equipment which is not described and illustrated in the new General Catalog No. 48, of the Webster Manufacturing Company of 4500 Cortland Street, Chicago, Ill. The catalog is a buckram bound volume of over 700 pages and treats of all practical standard types of elevating, conveying and power transmission machinery. The Webster Manufacturing Company is widely known among grain men, and it is equally well and favorably known in a score of other industries which handle products in large volume, such as coal, sand, gravel, ore, clay, ashes, lime, fullers earth, salt, etc. Every industry can find the greatest or the most minute of its needs in conveying and transmission equipment listed in this new comprehensive book. So carefully is it compiled that, knowing the work that is to be performed, the buyer can tell, almost at a glance, just the equipment and the size of the equipment needed. To the elevator operator, at the smallest country station or at the largest export point the book is particularly valuable and suggestive. Every step

in the handling of grain or its products is covered, and the catalog will remain a perpetual guide to the buyers of elevator equipment.

STEEL CUT

When millers grind corn for feed they like to make feed, and not a lot of corn flour and meal. The new Bulletin No. 113, just issued by the S. Howes Company, Inc., of Silver Creek, N. Y., on "Steel-Cut Corn", is timely and of interest on this account. The "Eureka" Corn Cutter is described in the bulletin, the No. 0 size being illustrated below. In its fore-word the bulletin says truly:

"Keen competition is forcing manufacturers to make better feeds. Every aggressive miller nowadays sells his products strictly on their merits; price is secondary. He knows that with quality goods he can win his share of the more desirable business. To receive the buyer's favor one's feed must at least equal a competing article at like quotation but,—what if it is better? Is it not reasonable to expect that it will fetch the higher figure the manufacturer is entitled to? Even admitting that he might not be able to get a fancy price, he can at least rest secure in the knowledge that his quality product requires less expense and effort to sell it. Thus viewing the situation in the worst light, he should be operating at a big advantage because his plant is running full time turning out a larger tonnage and without



THE "EUREKA" CORN CUTTER

increasing the overhead charges; sales are greater by a wide margin and capital is turned over much oftener."

The description of the various cutters, alone or in units combined with magnetic separators, graders, dust collectors, etc., in fact a whole feed outfit in one if desired, makes interesting reading. All the cutters described are equipped with Timken Roller Bearings, and the graders are driven by ball-bearing eccentrics. Discussions, capacities and prices are given in detail. The S. Howes Company will gladly send a bulletin to anyone interested.

EXAMS FOR U. S. GRAIN SAMPLERS NEXT MONTH

Several cities in every state in the Union have been chosen for the holding of civil service examinations for grain samplers during the last of this month and the first nine days of October. The United States Civil Service Commission announces that application for the examination must be received in Washington, D. C., not later than October 9.

The entrance salary is \$1,680 a year, with a maximum later of \$2,040. The requirements are completion of at least two years' work in an agricultural college, or at least three years' experience in some phase of commercial grain handling, or at least one year's experience in commercial grain sampling.

Both men and women are eligible. Some examinations, upon request, will be held at points in Alaska, the Canal Zone, and Hawaii. The duties of those successfully passing the examinations will be to sample grain under the direction of a supervisor, to identify and report upon all kinds of damage and odor in grain, and all plugged or fraudulent cars. They must be familiar "with elevator construction, and the methods of transferring grain from car to car, elevator to car, and from car to elevator".

CORN LANGUAGE

By D. A.

The corn plant writes an order for food when there is a shortage in the soil, and it writes in colors. G. N. Hoffer, pathologist of the United States Department of Agriculture, co-operating with the Purdue Agricultural Experiment Station, has solved the secret code in which the food wants are written. His method can be used in the field and requires but a few minutes.

The test is made during the latter part of the growing season, after the ears are well developed. A stalk is cut and split open lengthwise. A solution of sulphuric acid containing a few drops of what the chemists call "diphenylamine" is applied to the cut surface of the stalk. If the plant has had sufficient nitrogen the tissues will turn blue. If the plant has been starved for this food the tissues will be of a yellow-green color.

A lack of potassium in the soil may be detected by examining the tissues at the nodes or joints of the stalk. If the tissues turn red when a solution of potassium thiocyanate is applied the soil needs potassium. The amount of red color indicates the relative amount available.

In soils found to be acid in reaction, undersized or stunted plants indicate the need of phosphates, providing climate conditions were normal during the season. On such soils both lime and phosphates can be profitably used.

EASTERN FEED MILLS CONSOLIDATE

A preliminary announcement has been made of the consolidation of the Tioga Mill & Elevator Company of Waverly, N. Y., and the Empire Grain & Elevator Company of Binghamton, N. Y. The new firm will be known as the "Tioga-Empire Feed Mills, Inc." It will take several months to effect this consolidation and in the meantime operations will be continued as usual by both concerns.

The purpose of this consolidation is to render service to the users of feeds more economically through reductions in operating costs.

The headquarters of the new company will be at Waverly, where sales and production will be handled, but the Empire plant will be maintained and operated with an office and plant force. The Waverly plant is fully equipped with up-to-date machinery to turn out the necessary tonnage of the best quality and in addition to these large plant facilities it will handle molasses, feed, crushed and pulverized oats, crushed corn and oats, horse feeds, swine feeds, duck feeds, mineral feed, table meal.

The new consolidation will continue to manufacture the same lines of feeds under the trademarks, brands, formulas, of the two concerns with the addition of the feeds noted above.

The Empire Grain & Elevator Company was organized in June, 1891; present capital stock is \$100,000 and surplus. The Tioga Mill & Elevator Company was organized in 1908; present capital is \$250,000 and surplus.

The executives of the new company will be: Arthur C. Palmer, president and general manager, now president and general manager of the Tioga Company; L. M. Wilson, vice-president, now president and general manager of Empire; M. O. Wilson in charge of sales, at present vice-president of Empire; F. S. Deyo in charge of purchases, at present secretary of Empire; D. O. Wilson, assistant in charge of sales, now in sales work of Empire; L. M. Wilson and T. A. Wilson, second vice-president of Empire, will remain in Binghamton, but M. O. Wilson, F. S. Deyo and D. O. Wilson will locate at Waverly.

M. F. Baringer of Philadelphia is retiring as vice-president of the Tioga Mill & Elevator Company, Waverly, N. Y., due to his desire to retire from active business. Max F. Cohn, assistant manager in charge of purchases and sales of the company, has resigned and gone with the Sunset Feed & Grain Company, Buffalo, N. Y., as president.

NEWS LETTERS

MILWAUKEE

C. O. SKINROOD - CORRESPONDENT

THE expansion of Milwaukee in the allied lines of the grain industry, especially in the production the malt, is assured by building projects which have just been announced. The Froedtert Grain & Malting Company will build a large addition to its malt house and will build a 750,000-bushel grain storage building as well as install quite a little new machinery.

The Froedtert Grain & Malting Company has announced that it will spend between \$200,000 and \$250,000 on its expansion projects both at the Milwaukee and the Winona, Minn., plants. The company also has a plant at Red Wing, Minn.

Another building deal of considerable importance to the local grain trade is the plan of the Kurth Malting Company to build an addition to its storage capacity of about 360,000 bushels. The company will have total storage capacity after the building of approximately 1,100,000 bushels.

Both of these projects indicate that the malting business is looking upward with shipments now going from Milwaukee to many countries of the world. The yearly output of the Froedtert company will be increased from about 6,000,000 bushels to 9,000,000 bushels annually.

A third elevator project is that of the Chicago, Milwaukee & St. Paul Railroad which is rebuilding its Elevator "E" at a cost of approximately \$500,000. This project is now nearing completion.

These three elevator projects will give the city additional storage capacity of more than 2,000,000 bushels. This is expected by grain men to be a big help to grain business here in the future. The lack of elevator room has been a handicap to Milwaukee in the past, but in the future it is believed the city will have ample elevator capacity.

La Crosse County was the big winner in the sweepstakes of farm crop exhibits which were entered at the Wisconsin State Fair held at Milwaukee. La Crosse County won on the basis of money prizes taken with \$639, easily surpassing Milwaukee County exhibitors who had \$383 in prizes to their credit.

Among the individual exhibits H. T. Draheim of Gotham, Richland County, had a walkaway for grain prizes. In fact he took most of the grain prizes offered. Mr. Draheim took first in wheat, in oats, and in barley. Fred Vaughn of Lyons took first for legume seed. Pliny W. Jones of Black River Falls took first in soy beans. The sheaf grain prize went to E. H. Hommel of West Allis.

Mr. Draheim also walked away with the money for corn, taking first for the southern section of the state while Jacobson Bros. of Green Bay were the winners in the north section of Wisconsin. This award was based on corn of last year's crop. The corn raised this year is still so backward that it was decided not to award any prizes in this class.

The grain shown this year at the Wisconsin fair proving to be of high quality, comparing well with the exceptionally high grade of grain shown a year ago when the banner grain crop of many years was raised.

The September rate of interest on advances at the Milwaukee Chamber of Commerce was again fixed at 6 per cent, the same as the rate for many months past.

Grain storage at the Milwaukee terminal is picking up again after the supply hit a low point following the marketing of the remnants of last year's grain crop. With trainloads of new grain rolling in the storage supply is steadily increasing.

The wheat holdings at the local market have climbed to 808,000 bushels. The corn supply is only nominal with only about 100,000 bushels on hand at the opening of the month. The oats holdings lead all grains with a supply of more than 1,100,000 bushels. The barley storage is rather light in line with small receipts to date—only 290,000 bushels. The rye supply is surprisingly large in view of the small trade in this cereal, with approximately 360,000 bushels.

The total grain in storage is now around the 2-

700,000-bushel mark, the highest point reached since last spring when grain was piled up prior to the opening of navigation on the Great Lakes.

A Madison grain dealer who was widely known in Wisconsin, Alfred Hopkins, 60 years old, was found dead. With his body slumped forward in a chair in his office, with a radio in front of him grinding out jazz tunes, he was found. He had evidently died while listening to a jazz program. Physicians declared he died from heart disease.

One of the unique shipments of barley coming to Milwaukee this season was that of a solid trainload of grain sent from Kasota, Minn., to the Fraser-Smith Company here to fill eastern contracts. The grain was loaded on board the Steamer *LaSalle* and shipped to Buffalo. The shipment constituted 35 carloads of barley.

The Cargill Grain Company has taken a lease on the elevator of the Bernhard Stern & Son, the elevator which is a part of the equipment of the Atlas Mills. This elevator has a capacity of approximately 500,000 bushels.

A. R. Templeton, who has long been one of the leading grain dealers of this city, has said goodbye to his former Chamber of Commerce friends, as he is leaving for Minneapolis to take charge of the business of the Hales & Hunter Company. Mr. Templeton has a long and honorable record at the local market.

Charles Ray, old time banker and grain dealer of Milwaukee, is dead at the age of 91 in Los Angeles. He was one of the leading grain commission merchants decades ago but still managed to keep in touch with the traders of a later day.

The long connection with the grain exchange is shown by the fact that he became a member in 1866. For two years he was president of the Chamber. This was in 1877 and in 1878, about 11 years after he joined the board.

For a time he was an active grain trade man under the commission firm name of Ray & Dickinson. His bank, the National Exchange, was also in very close touch with the grain trade at all times.

Mr. Ray had been declining in health for some time.

The Milwaukee Chamber of Commerce reports an epidemic of big carloads of grain received here with 10 cars of oats averaging 2,897 bushels and one car passing the 3,026-bushel mark. Ten carloads of barley averaged 2,212 bushels and the largest of these carried 2,323 bushels of barley. Six cars of corn averaged better than 1,900 bushels each and the largest of these carried 1,983 bushels. Six carloads of rye recently reported averaged no less than 1,700 bushels each and the largest of them topped 1,851 bushels.

However, by digging into the early records of the Chamber of Commerce it was found that these were not so large after all, as the car record for the local market is 4,083 bushels of oats, 2,151 bushels of rye, 2,510 bushels of corn, 2,723 bushels of barley and 2,345 bushels of wheat.

J. L. Bowlus, manager of the transportation department of the Milwaukee Chamber of Commerce, is taking an intense interest in the Minneapolis and St. Louis road's 6 cent reduction in grain rates from Minneapolis to the Atlantic Seaboard.

"Milwaukee's reason for protesting is that her toes are being stepped on," Mr. Bowlus declared. "Milwaukee would have no protest to make if the lower rates were also made applicable through this gateway to the East. As long as this is not the case, Milwaukee's grain trade would be very seriously injured.

"Reduced rates only through one gateway is not fair to the other terminals. Milwaukee is not intermediate between Minneapolis and destination points to the East, nor is any railroad leading into Milwaukee a party to the tariff cut, hence this port is entirely excluded from any part in the transaction. For that reason we must take every step possible to try and protect the grain trade here."

Milwaukee grain men point out that Buffalo is rapidly taking the place of Minneapolis as the leading milling center of the country, as the shipments of grain from this port are now being made largely to the Buffalo mills.

Shipments of grain from Milwaukee by lake this

season have amounted to more than 6,000,000 bushels, of which approximately 4,762,000 bushels went to the Buffalo terminal. A total of 3,647,000 bushels of this was grain consigned to the flour mills at Buffalo. This record, grain men point out, shows how grain is rolling into Buffalo, and how these mills are rapidly being built up to a point of strategic importance.

With a total of 70,000,000 bushels handled for the past crop year, Superior has now become the greatest grain port in Wisconsin. The shipments of grain from Superior in the past crop year totaled more than 66,000,000 bushels. Despite this large total, it was 28,000,000 bushels less than was handled in the previous crop year.

Wheat was the outstanding grain in this showing with a total of 36,502,000 bushels received and approximately 33,000,000 bushels shipped. Barley and oats were second and third, respectively, in the grain list in the order of volume handled.

Members of the Milwaukee Chamber of Commerce are very much "peevish" at the change in the law by which ships do not have to take out clearance papers when traveling between ports of the United States. Secretary Harry A. Plumb says that this will leave the size of the port traffic largely in the dark and members of congress will thus have no light of this kind in apportioning its appropriations to the various ports for harbor improvements.

Mr. Plumb states, however, that the grain trade here will be conducted in an orderly way and with good statistical returns because all of the grain going out by lake has to be weighed and checked by the Chamber of Commerce weighing department. The Chamber at the same time obtains records of the destination of the grain and hence fairly accurate figures of the local grain trade will be available, despite the changes in abolishing clearance paper requirements.

John H. Manning has left the city and gone to Minneapolis to engage in the grain business on his own account. Mr. Manning has been chairman of the Chamber of Commerce committee called Supervisors of Grain Inspection and Weighing and this position will now be filled by E. H. Hiemke, who has been chosen as the acting chairman of the committee.

Another Milwaukee man who is leaving for other business fields is John J. Murphy, who has long been associated with the Cargill Grain Company. He has severed his connections in Milwaukee and will be associated with the Bartlett Frazier Co., at Chicago. This change will be made about September 15.

INDIANAPOLIS

H. M. RUDEAUX - CORRESPONDENT

FORTY per cent of the oats crop in Indiana is lost and severe damage, the extent of which is not yet determined, has been wrought to the crop by the heavy rains of the last few days. A large part of the oats crop in nearly all regions of the state was destroyed before the heavy rains of Sunday, September 5, and the additional rains Sunday provided the finishing destruction. In many places the shocks of oats are bobbing about on the water, sprouting and beyond hope of being saved. In other places where the crop is not completely ruined it is badly damaged. The damage of the corn crop is greatest in the lowlands of the state. Heavy rains have caused the corn to remain green much too long and if frost comes at the usual time this year, it will be nearly a calamity as far as the corn crop is concerned. If the rain stops and the water recedes gradually and the cloudy weather continues some of the corn may be saved, but should the sun come out hot while the water is still standing in the fields it would mean the ruin of the greater part of the crop.

Lowlands before the heavy rains on Sunday were already covered with water throughout the most part of the state, and most of the small streams were out of their banks in many places. At Anderson, Ind., two inches of rain fell in 48 hours and fields looked like lakes, in many places shocks of oats and wheat are standing in three feet of water. At Marion in Grant

County, one of the worst electrical storms in the history of the state was experienced and a disastrous rain fell unhalted for more than five hours. The damage to crops is estimated at \$300,000; more than three inches of rainfall was recorded.

Greensburg, located in Decatur County, reported much damage from excess rains and fields especially in the lowlands were covered with water. In many places corn is down, caused by the winds which accompanied the heavy rains.

* * *

With the continuation of the adverse weather, consignment notices are very few which is indicative of light movement of grain. Oats coming in are of an inferior grade, off color and heating. No. 2 Whites are bringing a premium of 5 to 7 cents a bushel over No. 3. Wheat is moving very slow, a few scattering cars coming in. No. 1 wheat, which is apparently taken from the farmers' bins, is in good demand. Nos. 5, 6 and Sample grades carrying excessive moisture or damaged by sprouting is only salable at a wide discount. Corn of the better grades is finding a ready sale with only fair receipts, and the present outlook of the new crop will undoubtedly slow up the shipments.

* * *

Edward Sheppard of the Cleveland Grain & Milling Company predicts that bleachers will work overtime on the oats crop this year, owing to their bad and inferior color. It was also predicted that unless the frost holds off until October 1, there will be very little good corn in Indiana.

* * *

Feed is moving slow with little demand and inquiry owing to the excellent pastures caused by the excess rainfall. Ordinarily September is a hot and dry month and the feed business opens up in good shape, but so far there is little interest displayed in feeds of any kind. Hay is very quiet with little demand, and like feeds is affected by the excellent condition of the pastures. The southern demand has dwindled to nothing and until frost comes there will be little or no demand. However, Indiana has harvested the finest crop on record, and according to some of the best hay experts the quality is unexcelled. Most arrivals have graded No. 1 Timothy in good condition and color.

* * *

Charles Shotwell of the Shotwell Grain Company and one of the pioneer grain men of this city has returned to his duties after almost a month's absence, caused by an operation for cataract of the eye.

* * *

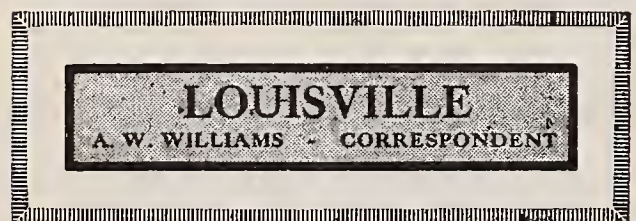
Sylvester Holzman, the benedict, has just returned from his honeymoon and again resumed his duties at the offices of the National Elevator Company. He is looking hale and hearty and full of pep.

* * *

The Lackey Grain Company has opened offices at No. 622 Board of Trade Building and are engaged in general grain business. Joseph Lackey was formerly connected with the Indiana Farm Bureau in the capacity as the wheat salesman.

* * *

It is rumored that Bert Boyd is about to launch another puzzle on the public that will more than cause the loss of sleep, and idlers and whittlers famous in small towns threaten his scalp.



BUSINESS since mid-July has been quite good with the elevator owners of Louisville, as storage space has been filled to capacity, there having been a heavy movement of wheat from the farms, which loaded private and public storage. As a result of heavy rains over most of August, as well as late July and early September, wheat threshing has been retarded in Kentucky, Indiana, Illinois and Ohio, and many owners who failed to thresh early have had a lot of bad wheat on their hands, which sprouted on the shock.

Just how bad this condition has been is shown by the fact that some mills are refusing to buy other than No. 1 Red wheat today, preferring to pay the two-cent premium to taking chances. Some seed wheat in shock, virtually sold at \$1.45 a bushel, for delivery when threshed, was recently offered at 80 cents, and wasn't worth that, as it was only good for chicken feed. One of the local mills recently received four cars of wheat, which made the Government test, but which was so off grade, and tested such a poor color flour, that the stuff was turned, rather than ground. There is a world of wheat that was cut as good wheat, but which was so badly damaged in shock that it doesn't represent milling wheat today.

* * *

Garbett S. Zorn, 50 years old, president of S. Zorn & Co., large local grain dealers and elevator operators, died at his home on Lexington Road, Louisville, on August 22, of apoplexy, he being found dead in his room shortly after breakfast. Mr. Zorn was a son of

Sebastian Zorn, founder of the company, and head of it until his death about three years ago. Garnett Zorn was active in club and business circles, and very well known in the trade. He is survived by his wife, daughter and a sister, Mrs. John Moran. His cousin, Harry A. Volz, for a number of years had been associated with Mr. Zorn in the management of the business, and will go right ahead with it. Mr. Volz is vice-president of the company, and also president of the city's Board of Aldermen. Mr. Zorn left an estate of over a quarter of a million dollars.

* * *

F. C. Dickson, of the Kentucky Public Elevator Company, reported that the plant was full up at the present time, mostly on long storage wheat, while daily handlings are running along at about normal for the season. The company as a whole received wheat early, and got away to a good start on the crop year.

* * *

Corn and tobacco in Kentucky were improved by the rainy mid-summer period, and a very fair corn crop is in prospect. Tobacco ripened early, and had to be housed, where it will be damaged in curing if the weather doesn't become dry. In August there was over seven inches of rainfall at Louisville, while some sections of the county had a good deal more.

* * *

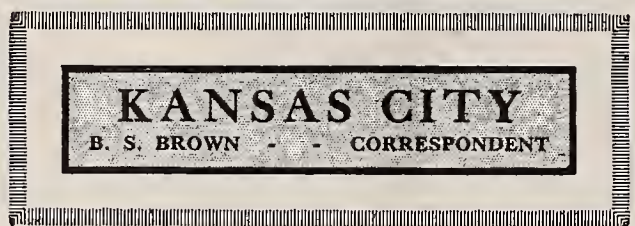
From Owensboro, Ky., it was reported on August 24, that J. B. DeHaven, president and general manager; and A. J. Lutz, sales manager, Sugarine Company, Owensboro, would go to Peoria, Ill., on October 1, to make their homes, and offices at the American Milling Company which bought the Owensboro concern, along with a similar plant at Omaha, giving it four sugar feed plants, two of which are at Peoria.

* * *

Although cash wheat figures at \$1.36 Louisville, local millers are not buying wheat just now, having fair stocks in hand, and not caring much about taking on new wheat, in view of the quantity of off grade stock being offered.

* * *

Millfeed prices have been a trifle lower account of larger production and good grass. Bran in jute is offered at \$26; brown middlings, \$28; gray, \$36; mixed feed, \$27; Red Dog, \$45; hominy feed, \$31; mixed corn and wheat feed, \$30.75; hominy feed, \$31.



A FLOUR and feed mill of 300 barrels daily capacity will be constructed here by the Ponca City Milling Company of Ponca City, Okla., an increase of 100 barrels over the capacity of the present plant, which is about 200 barrels, with elevator storage of approximately 200,000 bushels. The building will be entirely fireproof and modern in every way, according to the engineering plans, contracts for which have been let recently to Horner & Wyatt, Kansas City, expert consulting engineers who specializing in this type of flour mill work. Provisions will be made for a cornmeal and mixed feed unit, it is said.

Contracts for the erection of the mill have as yet not been let, although advance plans are now being drawn up by the engineers, and machinery and building contracts will be awarded as soon as these are completed. In all probability the present plant will be abandoned on construction of the new one. D. J. Donahue, Jr., is general manager of the milling company.

* * *

S. G. Cronin will succeed the late George W. Higby as manager of the Rocky Mountain Grain & Commission Company, Kansas City, it has been recently announced. The Rocky Mountain company is a subsidiary of the Colorado Milling & Elevator Company. Mr. Cronin was assistant to Mr. Higby before his death a short time ago, and has been associated with the Rocky Mountain company since the office opened on this market. James A. Jackson, assistant traffic manager of the Colorado Milling & Elevator Company of Denver, Colo., will fill the vacancy left by Mr. Cronin, as assistant to the manager of the company. Application has been made by Mr. Jackson for membership in the Kansas City Board of Trade. The membership will be transferred from the late manager of the Rocky Mountain company.

* * *

Wallingford Bros., Inc., is the firm name of a grain concern of Kansas City which has filed articles of incorporation with the secretary of state at Jefferson City. The company is incorporated at \$100,000 and asks to deal in grain, grain products, and other agricultural products. Earle G. Wallingford, Maude M. Wallingford and H. F. Spencer are associated in the firm filing for incorporation.

* * *

The third cereal laboratory to be established on the roof of the Kansas City Board of Trade Building is now in operation. The new laboratory, owned and operated by the Larabee Flour Mills Company, is said to be one of the most complete and modern in the

United States, and represents an expenditure of approximately \$12,000. Ralph S. Herman, widely known as a cereal chemist and chairman of the Kansas City Protein Referee Board, is in charge of the new laboratory. C. P. Hutchinson, W. L. Heald, Victor Hart, and Paul Merit are his assistants.

The laboratory is complete with equipment for experimental milling, moisture and ash tests, experimental baking, and other research work. All heating is done with electricity. It is possible to run 48 samples at the same time in the protein installation. The experimental bakery is equipped with a mixer, oven, and a large proofing and fermenting cabinet, where the temperature may be controlled. Special equipment in the research department include a viscosimeter, a centrifuge, and a potentiometer for electro-metric measurements. An Allis Experimental Reduction Unit with attached scourer is employed for the experimental milling of wheat samples. This is mounted in a room entirely glassed in from the remainder of the laboratory.

The equipment of the laboratory includes a digesting outfit for removing fumes from flasks while digesting wheat.

* * *

The Kansas City Board of Trade has instituted a separate Wheat Cash Sales Adjustment Committee and a Coarse Grains Adjustment Committee. The present committee was changed in designation to that of the Wheat Cash Sales Adjustment Committee, and a new committee will be named to handle the adjustments on coarse grains.

* * *

Kansas City grain futures transactions Saturday, September 4, totaled 1,484,000 bushels of wheat, 342,000 bushels of corn, and 42,000 bushels of oats.

* * *

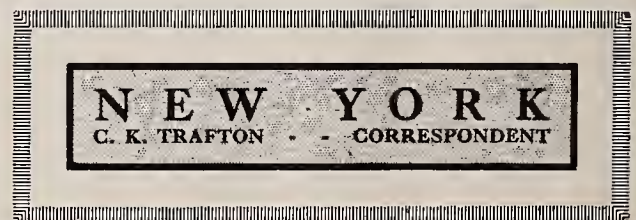
George A. Aylsworth is once more a member of the Kansas City Board of Trade, having been recently elected to membership. Mr. Aylsworth formerly was a member of the Board, but sold his membership when he left this market to go to Minneapolis with the Goetzmann-Aylsworth Grain Company. The company the headquarters of which is in Minneapolis, recently opened an office in the Kansas City Board of Trade Building.

* * *

A correction of the discriminatory rate relationship of wheat and flour from Kansas, Nebraska, Oklahoma and Texas and Missouri River milling points to California is asked in a formal complaint filed with the national Interstate Commerce Commission by the Southwestern Millers League. The complaint set out that the rate on wheat is 68 cents and on flour 75 cents, for which, it says, no reason exists. A hearing on the complaint at Kansas City is requested. Elaborate plans are being made in the Southwest to present to Commissioner Campbell of the Interstate Commerce Commission the reasons for the opposition to the proposed discriminatory rate cut out of the Northwest on flour. The hearing to be held in Minneapolis starting September 13 will be attended by Secretary Topping and Commerce Counsel Hogeland of the Southwestern Millers League. Prominent millers and grain men of the Southwest are expected to attend the hearing.

* * *

Three different organizations of cereal chemists of the Southwest territory are planning to hold a joint meeting in Kansas City, October 31. The Kansas City Protein Referee Board, the Nebraska Cereal Chemists Club, and the Kansas Chemists Round Table are the organizations included. Arrangements for the meetings, which will include entertainment features, are being made by Ralph S. Herman, chairman of the Kansas City Board. The meetings will be open to all those interested in cereal chemistry, and membership will not be required in the organizations for attendance privileges.



TRADING in tickets of membership on the New York Produce Exchange has been less active during the past month, following the establishment of new high record price levels on the recent advancing movement. Some of the best informed men concerned admit that regular memberships have sold at \$3,800, and it is claimed that as high as \$4,000 was paid. There are now said to be additional tickets available at \$3,800 and buyers are less eager. Likewise, associate memberships, which have sold up to \$3,000, are now to be had at that price, and while there is some inquiry, buyers' views are slightly lower.

* * *

Arthur Cutten, prominent grain operator on the Chicago Board of Trade, has been elected to membership in the N. Y. Produce Exchange.

* * *

John Melady, head of the Melady Grain Company, exporters, and well known in all markets, returned to his post on the N. Y. Produce Exchange in August

after an extensive survey of grain and market conditions in Continental Europe. Mr. Melady said in part: "There is no reason to believe that Europe will be a heavy buyer of American grain this year. While imports of some countries will be about normal, France, Belgium, and probably Italy will take less than usual. Both the French and Belgians are making a serious effort to stabilize their currencies and substitutes are being freely used in place of wheat. France at best will have only a normal crop and would have to import a large quantity were it not for this war-time abstinence. British crops are fair, but importers there are buying on a hand-to-mouth basis, which has a depressing effect upon the American export situation. The wheat crop was only normal in Russia and Roumania, and neither of these countries should be regarded as a serious competitor of the U. S. this year. Furthermore, the quality of their grain was not good, and while both countries were offering freely, they were doing little exporting. Those offerings, however, had the effect of holding off the purchases of American wheat, thus depressing prices."

John J. Moeller of Eisemann & Co., Inc., grain importers, is an applicant for membership in the N. Y. Produce Exchange.

Guy Hamilton, the active and popular manager of the New York office of Bartlett Frazier Co., had an escape last month from extremely serious if not mortal injuries that was close to miraculous and his wife and children were equally fortunate. With his son as driver, the party started for a trip to Lake Ronkonkoma on Long Island. In the great rush of traffic the green driver of another car stepped on the accelerator instead of the brake, crashed broad-side into the Hamilton machine and turned it completely over. Fortunately, it was a strongly built closed-model Packard so that it withstood the shock and as the windows were down there was little danger of damage from glass. Hence in spite of the grave possibilities, the injuries of the party were limited to wrenches and bruises which while painful enough seemed to be only temporary. Although sore and lame, Guy was able to report for duty on the Produce Exchange as usual, while his wife, who evidently sustained the worst shock and bruises, was incapacitated for only a few days.

P. Doyne of Louis Dreyfus & Co., the well known French grain firm, has been elected to membership in the N. Y. Produce Exchange.

Edwin Selva, one of the oldest members of the Produce Exchange but still erect and vigorous in spite of his advanced years, was the central figure last month of one of those pleasant little social functions which do so much to relieve the monotony of the daily routine. His many friends and admirers, having discovered that the fiftieth anniversary of his first appearance on the floor was about due—although somewhat confused as to the date—collected subscriptions to purchase a handsome ebony cane. His initials were inscribed on the gold cap of the handle, while the engraving on a gold band was to the effect that the cane was presented as a token of esteem from his friends, with the dates 1876-1926. It turns out that the correct date is October 12, but as this is already a holiday in this state owing to the well-known accomplishment of one Christopher Columbus, it will not be necessary to have an extra holiday declared. After serving honorably and with distinction with the Confederate forces during the Civil War, Mr. Selva came to New York and became identified with the old grain firm of Lane, Son & Co., and with the exception of a short time spent in Texas he has been here ever since. Subsequently he went with Knapp & McCord, another old grain firm, as superintendent of their elevator. When that elevator was combined with others to form the International Grain Elevating Company, Mr. Selva retained his position and is still a representative on the floor for "The International."

J. Frank Graham, of James E. Bennett & Co., well-known commission merchants on all the big exchanges, has been elected to membership in the N. Y. Produce Exchange.

R. Siedenburgh, Jr., of R. Siedenburgh & Co., prominent commodity brokers, is an applicant for membership in the Produce Exchange.

H. E. Sellers of Gooderham, Melady & Sellers, Ltd., grain merchants, has been elected to membership in the N. Y. Produce Exchange.

Alfred Fisher of Pritchard & Co., old-time commission merchants in grain, cotton, and cottonseed oil, also has been elected to membership.

W. R. Pharr, connected with the well known Board of Trade commission house of Lamson Bros. & Co., was a late August visitor on the Produce Exchange floor.

Members of the N. Y. Produce Exchange, and especially those particularly concerned with the wheat futures market, were interested to discover that the National City Bank, in its widely-read monthly circu-

lar, had mentioned the resumption of grain trading in an optimistic vein, expressing the opinion that other grains will be added to the list eventually. The item also stated that the volume of business in wheat was large enough to demonstrate the usefulness of an eastern market and that there is every reason to believe that the volume will grow as time passes.

E. H. L. Stonington of Raymer & Stonington, Inc., importers and exporters, has been elected to membership in the N. Y. Produce Exchange.

The members of the Produce Exchange voted late in August on the proposed amendments to Sections 4 and 58 of the By-Laws whereby the fee for transferring a ticket of membership would be increased from \$100 to \$300. The vote was extremely close, 84 being in favor of the amendments and 74 opposed.

Alphonse S. Rosenberg, flour and grain dealer, has been elected to membership in the Produce Exchange.

C. A. Whitenack, commission broker and trader, has applied for admission to membership in the Produce Exchange.

Louis Dreyfus, known throughout the world's grain trade as head of the large French firm which bears his name, arrived in New York early last month, being on his way to visit the principal grain markets and producing sections of the country.

Frederick L. Peisach of Kennedy & Co., stocks and bonds, has been elected to membership in the Produce Exchange.

Harry E. Beardsworth, according to an announcement posted on the Produce Exchange bulletin boards, has severed his connection with the exporting firm of E. A. Strauss & Co., Inc.

Walter Munn, manager of the New York office of Lamson Bros. & Co. of Chicago, surprised his many old friends by returning to his post on the Produce Exchange about two weeks earlier than expected. Of



ELEVATOR AND MILLING EXECUTIVES INSPECT SITE OF STANDARD MILLING COMPANY'S NEW BUFFALO ELEVATOR

course, they were all happy to greet him and welcome him upon his recovery from a severe attack of pneumonia which had kept him away from business for several months. Although he had lost considerable weight during his illness, he appeared to be in good condition and ready to take charge of affairs as usual.

W. E. Power of Coombs, Kerr & Pratt, stocks and bonds, is an applicant for membership in the Produce Exchange.

Franklin L. Lewi, associated with the old grain and hay firm of Theo. P. Huffman & Co., was a representative of the Produce Exchange at the Syracuse convention of the New York State Hay & Grain Dealers Association. In his address he spoke of the advantages of the new wheat futures market in this city. As chairman of the Tariff Revision Committee of the Association, he appealed to the members to support efforts now being made to obtain revision of the present tariff on buckwheat. He said in part: "Inaction, indifference or perhaps inefficiency on the part of someone is responsible for the present tariff." He suggested that the tariff be raised from 10 cents per hundred weight to 30 or 35 cents to compare with the duty on wheat. He stated that a higher tariff would protect buckwheat farmers in New York and Pennsylvania by curbing competition from Manchuria, France, Russia and Canada.

Prentice Strong of Stewart & Co., stock brokers, has been elected to membership in Produce Exchange.

Jerome Lewine, for many years active on the Produce Exchange, especially in the oil trade, but now prominently identified with Henry Hentz & Co. in

the cotton business, returned recently from a three months trip in Europe. He stated that England and France were becoming more aggressive in business and that conditions in the latter country are by no means as bad as generally pictured.

Joseph A. Wade, broker, has been elected to membership in the Produce Exchange.

W. H. Riemann, stocks and bonds, has been elected to membership in the Produce Exchange.

The death was announced on the Produce Exchange recently of Gilbert Tompkins, aged 77 years. Mr. Tompkins had been in poor health and absent from business for several years, but up to a few years ago he was active and vigorous in spite of his advanced years. His youthful appearance and bearing was attributed by some of his friends to his habit of indulging in long daily walks. He would frequently walk from his home in Brooklyn to the Produce Exchange.

BUFFALO
ELMER M. HILL CORRESPONDENT

HIGHEST grain carrying charges in years are in prospect for the autumn season on the Great Lakes, according to views expressed by leading factors in the transportation of grain over the inland waterways to Buffalo and other lower lake ports. Due to the very heavy demand for lake tonnage to handle iron ore and stone for blast furnace consumption, many of the largest lake fleets are tied up on contracts which will keep them out of the grain trade for 60 to 90 days, if not for the remainder of the 1926 navigation season. It begins to look as if

the bulk of the grain will have to be moved down the lakes in the smaller steamers.

Some steamship operators are confident a rate of 5 cents a bushel or more will be realized on grain moved after the new crop is harvested. As high as 4½ cents is already reported to have been paid for steamers for October loading at Lake Superior ports and some steamship men are holding out for higher prices for November loading. Elevator and railroad interests look for a tremendous volume of business following the northwestern and Canadian harvests and are preparing to give it quick dispatch when the movement does get under way.

Another large grain elevator of at least 5,000,000 bushels or more capacity is to be erected in the Buffalo harbor in conjunction with the development of the properties of the Standard Milling Company of New York on the Buffalo River. The corporation also plans the construction of a new flour mill at Buffalo with at least 10,000 barrels' daily capacity which may be increased later to 20,000 barrels daily. The Standard Milling Company within the last few weeks has purchased a site of eight and a half acres on the Buffalo River between St. Clair and Vandalia Streets. A. P. Walker, president of the Standard Milling Company, 49 Wall Street, New York, and E. J. Broenniman, vice-president, together with H. T. Gallagher, general manager of the North Western Consolidated Milling Company of Minneapolis; Benjamin Stockman, general manager of the Duluth-Superior Milling Company of Duluth; J. A. Simms, general manager of the Hecker-Jones-Jewell Milling Company, New York; T. Morgan Bowen, general manager of the Hecker-Jones-Jewell Milling Company, Buffalo; C. M. Hardenbergh, general manager of the Southwestern Milling Company, Kan-

sas City and Henry P. Werner, vice-president and general manager of the Hecker H-O Company of Buffalo, were in conference early this month with A. E. Baxter of the A. E. Baxter Engineering Company, of Buffalo, discussing the proposed elevator-mill development on the Buffalo River. It is reported the Standard Milling Company plans to move to Buffalo the Hecker-Jones-Jewell Milling Company from New York City and consolidate it with the Buffalo plant now at Seneca and Spring Streets into the modern new plant in the Buffalo Harbor.

* * *

Buffalo's designation as the delivery point for future contracts in grain dealings on the New York Produce Exchange has had no appreciable effect on grain shipments to this port. Nesbit Grammer, president of the Eastern Grain, Mill & Elevator Corporation, says that up until the early part of September no grain for delivery under September contracts through the New York futures market had arrived in Buffalo. As a matter of fact, Mr. Grammer does not look for any large amount of such grain this season. He says dealers in New York are fighting shy of September contracts because there is little in them. He believes it is quite possible the business will amount to something for December and it is expected it will be of considerable more volume for May deliveries. Mr. Grammer points out that New York has over-emphasized Buffalo's grain elevator capacity. It has been repeatedly stated that 30,000,000 bushels of elevator space are available, but Mr. Grammer says 20,000,000 bushels would be more accurate as elevators of the flour milling companies are not available for such business.

* * *

The world's largest bulk freighter, the steamer *Lemoyne* of the Canada Steamship Lines, Ltd., arrived in Buffalo with a cargo of 513,000 bushels of grain from Fort William, Ont., the greatest cargo of grain ever floated down the lakes in a single hull. The cargo was 8,000 bushels more than the previous best record which was held by the steamer *W. Grant Morden* of the same fleet. The *Morden*, however, was drawing 21 feet of water whereas the *Lemoyne* was drawing but 19 feet when she docked at the Saskatchewan Grain Elevator on the Hamburg turnpike. Built in Midland, Ont., the *Lemoyne* was christened the *Glenmohr* and began her career under that name.



WORLD'S LARGEST GRAIN FREIGHTER DOCKED AT BUFFALO

The ship was sold when on her maiden voyage and her name was changed to the *Lemoyne*. The ship, a massive structure of steel, is 633 feet long, 70-foot beam and a depth of 29 feet. It is estimated she could hold 600,000 bushels of grain—in fact she was scheduled to carry a cargo totalling 600,000 bushels on her trip from Fort William to Buffalo but the whole cargo was not available when she left Fort William. The ship has a crew of 33 men. Captain C. E. Robinson, who is the skipper of the great ship, is rounding out 35 years on the Great Lakes and says he has never seen a ship the equal of the *Lemoyne*. "They may build 'em bigger," he declared, "but they can't build 'em better."

* * *

The big steel Canadian freighter *Gleniffer*, which was brought out last year made her first visit to Buffalo early in September with a cargo of 452,821 bushels of barley which was unloaded at the new Marine Elevator. The entire cargo was handled in 12¾ hours, an average of 35,515 bushels per hour, which is considered record work for an elevator of two legs. Superintendent E. J. Cunningham expressed himself as well pleased with the speed in which the cargo was unloaded. The new ship is 566 feet long.

* * *

Spencer Kellogg & Sons, Inc., owners and operators of the Kellogg Grain Elevator on the Buffalo River, will go on trial before Federal Judge John R. Hazel at the November term of United States District Court

in Buffalo on an old indictment charging violations of the Elkins Act, specifying the granting of rebates and special concessions to various customers. The date for the trial was agreed upon at a conference between Federal Attorney Richard H. Templeton and Elmer B. Collins, special assistant attorney general at Washington. Indicted with Spencer Kellogg & Sons, Inc., were the Great Eastern Elevator Company, the Dakota Elevator Company, and the Western Elevating Association. In the case of Spencer Kellogg & Sons, Inc., it is specifically charged the elevator owners gave a rebate of one-half cent a bushel of grain to E. S. Strauss Co., Inc., grain dealers.

* * *

Trading in wheat futures on the New York Produce Exchange has been so successful that Buffalo grain and elevator interests have been notified that operations may soon be extended to corn, oats and rye. The volume of the wheat trade has reached 5,000,000 bushels daily. The September review of the National City Bank of New York says that cheap water transportation has made Buffalo, where the New York contracts are deliverable, the natural northern gateway for the flow of grain from the Western States and Canada to the eastern seaboard and abroad. Drawing with equal facility from Milwaukee, Chicago and Duluth and with ample elevator storage capacity, the Buffalo market rests upon a broad base of supplies that cannot be excelled anywhere in the country.

TOLEDO

S. M. BENDER CORRESPONDENT

THIS market has again come to the front during the past month in the shipping of wheat for export. Several boats were loaded at private and public elevators for shipment abroad. The local mills also have stocked up with the first run of excellent quality wheat. Lucas County, in which Toledo is located, had the largest average yield for the state, at 32 bushels to the acre. Some yields run as high as 60

on this particular feed. So far mills have not had to let their feeds accumulate much and this has helped the general situation immensely. Farmers will in many cases be forced to feed their wheat and oats which were left in the fields and sprouted and this may take some of the edge off the demand for mill-feeds. The shortage of forage crops in this section should be felt sooner or later however and farmers will have to substitute millfeeds for lack of these.

* * *

It is the general opinion among the trade here that corn has been greatly improved by rains and unless an early frost comes should make a fair crop. Old corn has been bringing good prices and the demand active most of the time. Oats have been severely damaged by the heavy rains and receipts are mostly under the contract grade. No. 2 Whites are bringing from three to five cents premium and buyers are anxious to get them at that. It is doubtful if the country will be able to ship many first quality at least around here because of the wet weather during harvest.

* * *

The demand for hay remains quiet, as it has been for several weeks due to good pasturage. About the only sales have been made to the race track trade and even they have been hunting for bargains. Receipts have been very light due to heavy farm work. Prices have held well considering everything and dealers are of the opinion that later when the demand increases they will work some higher. The trend will depend largely on offerings during the next 60 days.

* * *

Clover seed has shown sensational strength during the month due to light and adverse crop reports from parts of the clover belt. Trade has been very active and bidding was lively for all offerings. Deferred futures were quickly advanced and then reacted only to meet with stubborn resistance from dealers and investors. There was some profit-taking at the top and hedging sales for foreign accounts but all were quickly absorbed by buyers who look upon clover as an excellent buy. Old prime Clover has attracted attention too at its wide discount under the October. It is foreign seed but of excellent quality and dealers are finding a good inquiry for it. Advices from abroad tell of a favorable outlook and probability of an average crop unless weather interferes. Our own Clover crop appears to have suffered some damage and it is a question whether the outturn will be as large as last year or not. Alsike has been strong and the demand for the cash article very active. The new crop is mostly fair quality and with little cleaning should make merchantable seed. Offerings so far have been scarce and this has been the main cause of advancing prices. Timothy has been steady most of the month and there seems to be plenty of new for sale at the present price level. The Government report of a crop 10 per cent below that of last year caused temporary firmness but hedging pressure soon appeared and buyers backed away. Old stocks are being sought by dealers throughout the country and it is possible that the fall demand will be larger than anticipated.

* * *

Harold Anderson, president of the National Milling Company, which is now a part of the National Biscuit Company, was elected a director of one of Toledo's largest banks recently. The Toledo Trust Company numbers 49 representative business men on its Board of Directors and several are members of the Toledo Produce Exchange.

* * *

The Brick Mill and Grain Company, Kenton, Ohio, was destroyed by fire Saturday evening, September 4, with a loss estimated at \$30,000. It is believed to have been hit by lightning during a severe storm which damaged crops in the surrounding country.

* * *

The old C. H. & D. Elevator, now run by Rosenbaum Bros., Chicago grain firm has been repaired recently and some new equipment installed which provides for more rapid handling of grain. George Woodman, widely known throughout the trade in this section, is manager.

* * *

Fred Mayer of J. F. Zahm & Co., and Kent Keilholtz of Southworth & Co., were hearty endorsers of the new newspaper service offered by the *Toledo Blade* and their letters were published on a page with others from business men who had complimented them.

* * *

Art Cummerow and Louis Schuster of the C. A. King & Co., are ardent golfers when they can find time and it is reported they are in line as early as six o'clock on Sunday mornings waiting for their chance to bat the cover off the elusive white ball. Louis is said to be a regular "Babe Ruth" of the links, many of his drives going 300 yards. The putting of both is close but not in.

* * *

The accidental death of Roy V. Parsons, assistant secretary of the Toledo Produce Exchange, was a severe shock to his many friends and members of that body. He was motoring from one lake to another in southern Michigan with two other Toledo men, after attending a dance. The car, which Roy was driving was forced off the road by another car or other cause not determined, and turned over, pinning the three underneath. All three were almost instantly killed. Roy was 24 years old and had been employed

by the exchange for about five years. His cheerful disposition and desire to get ahead had made him popular with members as well as a large circle of young friends. His father and mother and the young lady to whom he was recently engaged were grief stricken by his sudden passing. A great host of friends and beautiful flowers were supreme testimony at his funeral of his character and personality.

* * *

J. F. Zahm & Co. and C. A. King & Co. were the successful bidders for the Central Elevator, which they bought through Edgar Thierwechter, Oak Harbor, Ohio, for \$10,600. The storage capacity of this elevator is 200,000 bushels and there are 10 large steel tanks and other valuable equipment for cleaning and drying grain. After extensive repairs it will be run jointly for the two firms.

* * *

Jesse W. Young, of Southworth & Co., was in the Eastern States during the past month calling on the trade.

* * *

Grain receipts for the past month were 2,890 cars of wheat, of which 1,863 cars graded No. 1 and No. 2 Soft Red, 227 cars of corn, 499 cars of oats, 39 cars of rye and seven cars of barley. Total number of cars inspected 3,662. Shipments by lake were 415,465 bushels.

* * *

Corn has been matured too fast by rains and it will be subject to damage from even a light frost. Many millers have refused to take wet wheat and country dealers the same with wet oats. Dealers in this market refused to bid for oats until they dried out some.

* * *

The Michigan Hay and Grain Association held its annual meeting at the New Hotel Olds, Lansing, Mich., August 18 and 19. Several Toledo dealers attended and Bill Cummings of J. F. Zahm & Co. lead the singing. Reports were mostly favorable for corn although much damp wheat and oats were reported. The outlook for the present season was considered good.

DULUTH

S. J. SCHULTE - CORRESPONDENT

MEMBERS of the Duluth Board of Trade experienced a severe shock in the sudden death on September 1 of Clarence T. Mears, president and manager of the Itasca Elevator Company. Always active in the pit, Mr. Mears had put through some heavy trading from the opening of the market up till about 10 o'clock, when he stepped in to the ante room just off the trading floor and fell over in a faint. Physicians worked hard to resuscitate him but without success, and he was pronounced dead, cerebral hemorrhage being given as the cause of his death.

Mr. Mears had an interesting career in the grain trade and he had won recognition as one of the ablest operators in the Northwest. He was a son of the late E. Ashley Mears, who had been prominent in North Dakota for many years as a banker and financier. He was born in Chicago in December, 1872, removing with his parents to Fargo, N. D., when he was 10 years of age. At the beginning of his business career he operated an elevator for a time at Milton, N. D., and early in 1908, he moved to Duluth and became identified with Ely Salyards & Co., as trading floor man. In April, 1912, he joined the Itasca Elevator Company, working up from floor trader to president and general manager upon the death of M. L. Jenks, a little more than a year ago. He is survived by his widow, who he married in Fargo, N. D., 27 years ago and two brothers, William R. Mears of Boston, Mass., and Norman T. Mears of St. Paul, and two sisters living in Minneapolis.

* * *

The Duluth Board of Trade backed up by grain boards at Buffalo, Kansas City, Omaha, Atchison and Chicago, is putting up a stiff fight against the proposal of the Minneapolis & St. Louis and the Minneapolis St. Paul & Sault Ste. Marie Railroads to put into effect new rate schedules allowing a reduction of six cents per hundred pounds on grain shipped from Minneapolis all-rail to eastern points. At the hearing held before the Interstate Commerce Commission at Minneapolis on September 13, Fred Keiser, representing the traffic department of the Duluth Chamber of Commerce and Charles MacDonald, secretary of the Duluth Board of Trade, presented data showing the discriminating features of the proposed new rate schedule which would grant reductions on grain shipped through Minneapolis from certain specified shipping points in Minnesota, Montana, North Dakota and part of South Dakota. They argued that the farmers of the Northwest would not benefit by the proposed reduction in freight rates and that the purpose of the proposed tariff was not to benefit the farmer, but to divert the bulk of the grain shipped from over the Northwest to the Minneapolis market. They contended that the reduction was announced by

the Minneapolis & St. Louis Railroad as the result of pressure brought to bear upon it by Minneapolis milling interests and that permitting it to go into effect would result in disrupting the entire freight rate structure of the Middle West. The outcome of the cases is being awaited with deep interest by the grain and flour milling trades of the Northwest and Middle West. The new freight rate tariff was suspended by the Interstate Commerce Commission from August 24 to September 23. Some satisfaction is being derived in grain trade circles here from the remembrance that the Commerce Commission turned down an application two years ago for a similar reduction in the all grain rate from Minneapolis to eastern points.

* * *

The movement of new crop wheat and other grains to this market has been unusually slow in starting in this fall, attributable largely to the unfortunate holding up of threshing over Minnesota and North Dakota by heavy rains. The run appeared to be on the point of starting in actively two weeks ago when the rains put a damper upon it. An illustration of the effect was afforded in three days' accumulation of all grains on track here on the Tuesday following Labor Day of 1,831 cars against 3,393 cars at the same period last year. On the following day receipts totaled 499 cars as against 1,147 cars last year. Elevator and commission men fear that considerable damp wheat will be offered on the tables this fall as a result of the bad harvesting conditions and that they will be faced by difficult problems in determining prices fair to growers and dealers alike to be paid for that character of grain coming in. Buyers of the local and Buffalo mills have been active buyers so far of Spring wheat and Durum carrying fair percentages of protein. To begin with, premiums running up to as high as 50 cents over the contract price were paid by the mills for No. 1 Amber Durum running high in protein. As it turned out the grain bought was for special mixing purposes in connection with outstanding flour contracts and when that need had been taken care of the top premium to a precipitate drop to 15 cents over from an official previous basis of 35 cents over.

Prior to the beginning of the fall movement, Durum specialists on this market were unable to accept new export offers on account of there being no free stocks in the elevators available for prompt shipment. Now that the grain is moving, operators are looking forward to putting through a heavy export trade in Durum up to the close of navigation. Buyers for Buffalo mills are also figuring upon attracting a good run of Spring wheat this way by offering as liberal premiums as they are able to for it. The trade is therefore assuming that growers of Spring wheat and Durum will have no reason for complaint on the score of realizing fair premiums when they come to market their best grades of grain.

* * *

Specialists in the rye market here are deriving some satisfaction from the knowledge that export interest has picked up materially at the present lower level of prices and in some strong hopes are being entertained that the market will be gradually advanced to a level that will admit of a profit to holders of present elevator stocks and at the same time attract a movement of new grain from the country to this market. Said F. E. Lindahl, manager of the Cargill Elevator Company, in that connection, "It looks as if foreigners are going to want all the rye we will have to offer on the basis of the light crop this season and it is quite possible that present quotations will look cheap later on."

* * *

Rye stocks in the elevators here at present aggregate around 2,850,000 bushels, some of which has been sold for early delivery in the East. Current receipts of rye have been on a better scale recently.

* * *

The only business changes on the market here during the last month came in elections to memberships on the Duluth Board of Trade of Percy Fuller, of the American Linseed Company; J. K. Cook, buyer for the Quinn-Shepherdson Company; and Paul K. Corcoran, buyer for the Occident Elevator Company, on this market. Percy Fuller has come here from Winnipeg to assume his present position as agent for the American Linseed Company. Mr. Corcoran having resigned to join the Occident Elevator Company's staff.

* * *

An interesting incident in grain trade and lake shipping circles here came in two Canadian steamers going under the elevator spouts September 10 for mixed cargoes aggregating 1,000,000 bushels of Spring wheat, Durum and rye and they cleared for Port Colborne, Ont., where the grain will be unloaded for export via Montreal. The steamer *Le Moyne*, which loaded a mixed cargo of 550,000 bushels of Spring wheat, Durum and rye at the Peavey, Itasca and Capitol Elevators, is rated as the largest freighter on the lakes, being 630 feet in length with a beam of 70 feet. She was built at Midland, Ont., for the Canada Steamship Lines. She went into commission on September 1 and on her maiden trip from Fort William down the lakes she took on a record load of 513,000 bushels of wheat, beating the record of 508,000 bushels held by her sister ship, the *Grant W. Morden*. On her return trip she carried a load of 15,400 tons of coal, which was 200 tons under the previous coal cargo record.

By a peculiar coincidence, the *Grant W. Morden*, which ranks as the second largest freighter on the lakes, being six feet shorter than the *Le Moyne*, also reached here on the same day and loaded 450,000 bushels of Spring wheat, Durum and rye for Port Colborne at the Consolidated, Cargill and Itasca Elevators. The arrangements for chartering the two freighters were made by H. H. Dinham, manager of the Duluth Shipping Company, agent for the Canada Steamship Lines here.

* * *

R. M. White of the White Grain Company commented upon the continuance of an active trade in feeds with demand coming largely from dairying interests over Minnesota and North Dakota. While dealers are confining their buying to an immediate requirements basis, the aggregate shipments to them are running well ahead of last year.

* * *

Stocks of all grains in Duluth and Superior Elevators as of September 10, aggregated 16,945,000 bushels, including 4,327,000 bushels of wheat; 2,000 bushels corn; 9,075,000 bushels oats; 2,819,000 bushels rye; 459,000 bushels barley and 265,000 bushels flaxseed. Oats is the only grain in the elevators that is dragging, according to operators. Following the setting of low quotations in that grain its market has become lifeless, exporters complaining of an almost complete lack of interest. Some eastern domestic inquiry has however been noted recently and dealers are hopeful of a fair trade resulting.

* * *

Elevators here are still holding 1,429,000 bushels of wheat owned by the Washburn Crosby Company and the Pillsbury Flour Mills Company. It is scheduled to be shipped to Buffalo and on the forwarding of small lots the aggregate has been cut around 1,000,000 bushels from its peak.

* * *

The vessel rate on wheat and rye from the Head of the Lakes to Buffalo is being held at from 3 to 3½ cents. Some chartering of space has been reported at 4 cents for first half of October shipment.

MINNEAPOLIS

EDWIN O. WELDE - CORRESPONDENT

ACCORDING to crop authorities, basing predictions on early threshing returns the Northwest's Spring wheat yield, estimated by the Government at 158,214,000 bushels, is turning out better than was expected. Corn crop prospects have greatly improved by warm, rainy weather, and the crop is in good condition.

* * *

W. W. Morse, manager of the Upper Mississippi Barge Line Corporation, has announced that a barge line rate on grain and grain products for export out of Minneapolis, 15½ cents under the present lake and rail rate from the Northwest to New York, will be established when operations start next spring. Rates from the Southwest into Minneapolis likewise will be cut. The plan of the barge line corporation is to:

Offer in competition with the present lake and rail rate to New York on grain for export of 35½ cents, a rate of 20 cents to New Orleans. The same rate usually applies from New Orleans as from New York on ships to foreign countries.

Make a rate on grain from the Southwest into Minneapolis of approximately 80 per cent of the all rail rate.

Include flour and other grain products in the reduced rate.

Assure enough equipment on the barge line so that all business can be handled. The War Department has promised equipment adequate to take care of any amount of business obtained will be provided.

The barge line has ordered 15 barges, to be operated in fleets of five, each fleet to have a capacity of more than 2,500 tons of freight.

* * *

J. H. Mayhew has been elected president of the Carter-Mayhew Manufacturing Company, Minneapolis, manufacturers of the Carter Disc Separator. He succeeds C. W. Carter, who has held that position since the organization of the company. Mr. Carter has sold the major part of his interests in the company, and will now devote all his time to development of improved mill and elevator machinery, which the Carter-Mayhew Company will market. Mr. Mayhew will leave for England about the fifteenth of September to give his personal attention to the large interests of the company in Europe. R. J. S. Carter will remain as vice-president of the firm, and H. A. Morse as secretary-treasurer.

* * *

Edgar A. Kirk, formerly with the McCaull-Webster Elevator Company, Minneapolis, and recently with the Tenney Company, Duluth, died August 21. Funeral services were held August 25 in Minneapolis.

* * *

Recent visitors in Minneapolis include: F. L. Carey, president of the Chicago Board of Trade; Harry F. Hunter, manager of the Chase Bag Company, Milwaukee, Wis.; M. C. Burns, of the Traders' Feed & Grain

THE AMERICAN ELEVATOR AND GRAIN TRADE

Forty-Fifth Year

Company, Buffalo, N. Y.; W. O. Fehling, of Samuel Bell & Sons, Philadelphia, Pa.; Louis McCarthy, formerly of the McCarthy Bros. Grain Commission Company, and now engaged in real estate in Florida.

Mack Grant, formerly with the Van Dusen Harrington Company, Minneapolis, has opened a Minneapolis office for the Froedtert Grain & Malting Company, of Milwaukee, Wis.

The Brooks Elevator Company has purchased the Union Elevator and will operate it under the name of the Union Elevator Company.

The privilege of corporate membership to the Minnesota Wheat Growers Co-operative Marketing Association was rescinded September 2.

Roy I. McAllister, of the freight department of the International Mercantile Marine Company, New York, has been spending his vacation in Minneapolis.

GRAIN NEWS FROM BOSTON

By L. C. BREED

Up to the present time the situation in regard to the Boston Grain & Flour Exchange in the matter of a change from its location in the Milk Street building, which has been the home of the grain and flour trade for many years, remains practically the same as a month ago, no steps have been taken about engaging other quarters.

From time to time, new members are added to the membership of the Exchange which keeps it in a strong position.

The market on coarse grains has been ruling irregular, small fluctuations occurring daily. The inquiry for corn of late has been light, while oats are in fair demand. Owing to good pasturage, feedstuffs are in moderate request. The mills having increased their output recently made concessions in prices. Canadian mills are offering only for future delivery as they have not started on the new wheat.

Offerings of hay have not been heavy, the receipts in August having been smaller than for the previous month. As the demand was moderate the supply was ample. Some new hay is arriving from Ohio which is selling at about \$1 under old of similar grade. Receipts of hay for the month of August 145 cars; straw 11 cars.

As tabulated by the Boston Grain & Flour Exchange, the receipts of grain at Boston for the month of August were as follows: Wheat, 6,650 bushels; corn, 1,100 bushels; oats, 77,200 bushels; rye, 2,725 bushels; malt, 4,200 bushels; mill feed, 76 tons; oatmeal 3,890 cases.

Stocks of grain at Boston in regular elevators as of August 31, were as follows: Wheat, 4,109 bushels; oats, 15,555 bushels; rye, 504 bushels.

Among the visitors to the Exchange during the month of August, outside of New England, were the following: Geo. W. Merritt, Schuyler, N. B.; L. Wright, Soldier's Summit, Utah; Stuart W. Rider, Minneapolis, Minn.; J. J. Fahey, New York City; F. A. McLellan, Buffalo, N. Y.; M. H. Davis, Little Rock, Ark.; E. L. Quinn, New York City; De Witt P. Finley, Newburgh, N. Y.; F. C. Meyer, Menomonie, Wis.; F. H. Woodward, Orlando, Fla.; Joseph Wilkins, Washington, D. C.; John H. Wilkins, Washington, D. C.; B. B. Sheffield, Minneapolis, Minn.; Cliff H. Morris, New York City; Edward Molnar, Peoria, Ill.; E. Walter Long, Harrisburg, Pa.; H. E. Irwin, Grafton, Ohio; H. E. Tweeden, Buffalo, N. Y.

RECEIPTS AND SHIPMENTS

Following are receipts and shipments of grain, etc., at the leading terminal markets in the United States for August:

BALTIMORE—Reported by Jas. B. Hessong, secretary of the Chamber of Commerce:

Receipts		Shipments	
1926	1925	1926	1925
Wheat, bus..	4,436,718	1,688,508	1,744,414
Corn, bus....	21,747	80,503	.....
Oats, bus....	111,459	390,131	39,293
Barley, bus..	5,595	349,609	325,456
Rye, bus....	23,413	8,520	.....
Malt, bus....	17,314	.....	6,600
Buckwheat, bus. ....	.....	1,219	.....
Straw, tons..	27	51	.....
Hay, tons....	801	1,054	.....
Flour, bbls..	161,296	117,830	24,136

CINCINNATI—Reported by D. J. Schuh, executive-secretary of the Cincinnati Grain & Hay Exchange:

Receipts		Shipments	
1926	1925	1926	1925
Wheat, bus..	1,556,800	1,456,000	617,400
Shelled Corn, bus.	618,800	429,800	442,400
Oats, bus....	522,000	528,000	138,000
Barley, bus..	8,400	4,200	.....
Rye, bus....	28,000	41,800	5,600
Ear Corn, bus.	2,800	2,000	.....
Grain Sorghums, bus.	8,400	4,200	.....
Feed, tons..	2,040	1,170	.....
Hay, tons...	4,312	3,663	.....

CHICAGO—Reported by J. J. Fones, secretary of the Board of Trade:

Receipts		Shipments	
1926	1925	1926	1925
Wheat, bus..	14,907,000	5,337,000	10,605,000
Corn, bus....	2,769,000	7,784,000	3,851,000
Oats, bus....	7,752,000	14,251,000	2,426,000
Barley, bus..	1,567,000	1,860,000	1,955,000
Rye, bus....	286,000	98,000	10,000
Timothy Seed, lbs.	5,907,000	5,933,000	3,393,000
Clover Seed, lbs.	366,000	328,000	71,000
Other Grass Seeds, lbs..	4,294,000	1,537,000	1,368,000
Flax Seed, bus.	107,000	7,000	1,000
Hay, tons...	8,768	13,695	832
Flour, bbls..	1,258,000	939,000	869,000

DENVER—Reported by H. G. Mundhenk, secretary of the Grain Exchange:

Receipts		Shipments	
1926	1925	1926	1925
Wheat, bus..	2,251,500	840,000	141,000
Corn, bus....	131,750	376,650	66,650
Oats, bus....	86,000	174,000	30,000
Barley, bus..	30,600	120,700	1,700
Rye, bus....	30,000	28,500	1,500
Hay, tons...	450	220	.....
Beans, carloads .....	.....	78	98

DULUTH—Reported by Chas. F. MacDonald, secretary of the Board of Trade:

Receipts		Shipments	
1926	1925	1926	1925
Wheat, bus..	4,627,608	3,795,829	1,915,210
Corn, bus....	13,375	13,440	.....
Oats, bus....	117,439	3,705,949	106,375
Barley, bus..	576,102	3,200,260	306,292
Rye, bus....	565,171	429,935	402,790
Flax Seed, bus.	184,555	240,693	190,180
Flour, bbls..	679,160	827,340	742,040

FORT WILLIAM, ONT.—Reported by E. A. Ursell, statistician of the Board of Grain Commissioners:

Receipts		Shipments	
1926	1925	1926	1925
Wheat, bus..	1,521,030	1,177,854	10,556,964
Corn, bus....	3,057	3,220	3,057
Oats, bus....	704,097	967,078	1,891,019
Barley, bus..	549,224	353,832	1,910,724
Rye, bus....	237,670	179,017	62,404
Flax Seed, bus.	61,095	66,453	488,067

INDIANAPOLIS—Reported by Wm. H. Howard, secretary of the Board of Trade:

Receipts		Shipments	
1926	1925	1926	1925
Wheat, bus..	1,530,000	861,000	468,000
Corn, bus....	889,000	1,496,000	712,000
Oats, bus....	1,786,000	2,036,000	1,102,000
Rye, bus....	53,200	24,000	32,000

KANSAS CITY—Reported by W. R. Scott, secretary of the Board of Trade:

Receipts		Shipments	
1926	1925	1926	1925
Wheat, bus..	17,073,000	8,567,100	8,356,600
Corn, bus....	904,500	1,403,750	726,000
Oats, bus....	470,000	4,632,500	260,000
Barley, bus..	32,000	96,000	19,200
Rye, bus....	171,000	37,400	79,500
Bran, tons...	9,680	5,560	16,140
Kaffir Corn, bus.	93,500	182,600	174,000
Hay, tons....	21,324	30,324	1,776
Flour, bbls..	93,925	74,100	741,000

LOS ANGELES—Reported by M. D. Thiebaud, secretary of the Grain Exchange:

Receipts		Shipments	
1926	1925	1926	1925
Wheat, carloads ..	342	349	.....
Corn, carloads ..	224	176	.....
Oats, carloads ..	33	103	.....
Barley, carloads ..	163	269	.....
Milo, carloads ..	34	23	.....
Kaffir Corn, carloads ..	26	16	.....
Bran, carloads ..	109	118	.....
Flour, carloads ..	147	158	.....

MILWAUKEE—Reported by H. A. Plumb, secretary of the Chamber of Commerce:

Receipts		Shipments	
1926	1925	1926	1925
Wheat, bus..	2,077,600	1,089,200	1,969,342
Corn, bus....	214,600	430,680	166,375
Oats, bus....	2,382,120	3,152,250	472,600
Barley, bus..	1,123,820	2,443,535	153,399
Rye, bus....	127,350	73,165	22,650
Timothy Seed, lbs. ....	.....	185,340	87,075
Clover Seed, lbs.	244,920	173,585	112,265
Flax Seed, bus.	28,600	12,870	.....
Hay, tons....	441	1,217	144
Flour, bbls..	210,650	247,230	11,200

MINNEAPOLIS—Reported by G. W. Maschke, statistician of the Chamber of Commerce:

Receipts		Shipments	
1926	1925	1926	1925
Wheat, bus..	11,368,290	13,309,300	2,913,150
Corn, bus....	656,420	453,000	309,860
Oats, bus....	4,641,430	10,760,770	754,920
Barley, bus..	1,414,490	3,783,690	505,350
Rye, bus....	466,490	979,340	96,400
Flax Seed, bus.	830,500	1,094,440	188,770
Hay, tons...	2,053	2,343	211
Flour, bbls..	26,001	64,488	1,035,223

MONTREAL—Reported by J. Stanley Cook, secretary of the Board of Trade:

Receipts		Shipments	
1926	1925	1926	1925
Wheat, bus..	8,626,023	9,142,800	9,071,023
Corn, bus....	45,947	126,689	.....
Oats, bus....	2,812,778	6,373,385	1,137,916
Barley, bus..	3,212,971	844,006	2,012,906
Rye, bus....	1,017,364	3,663,419	471,302
Flax Seed, bus.	125,468	172,572	.....
Hay, bales ..	29,090	110,061	44,008
Flour, bbls..	330,491	253,624	249,085

NEW ORLEANS—Reported by S. P. Fears, Chf. Gr. Insptr. of the Board of Trade, Ltd.:

Receipts		Shipments	
1926	1925	1926	1925
Wheat, bus..	537	468	656,424
Corn, bus....	169	210	489,279
Oats, bus....	79	51	76,971
Barley, bus..	3	8	.....
Rye, bus....	13	9	.....
Grain Sorghum	3	3	.....

NEW YORK CITY—Reported by H. Heinzer, statistician of the Produce Exchange:

Receipts		Shipments	
1926	1925	1926	1925
Wheat, bus..	7,282,100	5,296,800	4,030,000
Corn, bus....	117,000	61,600	.....
Oats, bus....	876,000	4,156,000	140,000
Barley, bus..	1,355,400	1,049,600	848,000
Rye, bus....	921,500	399,000	.....
Clover Seed, lbs. ....	.....	600 Bags	512
Flax Seed, bus.	427,500	51,500	.....
Hay, tons...	4,200	5,341	1,121
Flour, bbls..	1,003,000	905,380	258,000

OMAHA—Reported by F. P. Manchester, secretary of the Omaha Grain Exchange:

Receipts		Shipments	
1926	1925	1926	1925
Wheat, bus..	4,603,200	3,494,400	3,010,000
Corn, bus....	1,682,800	750,400	1,068,200
Oats, bus....	1,660,000	3,904,000	1,406,000
Barley, bus..	180,800	225,600	121,600
Rye, bus....	190,400	169,400	161,000

PEORIA—Reported by John R. Lofgren, secretary of the Board of Trade:

Receipts		Shipments	
1926	1925	1926	1925
Wheat, bus..	381,600	248,550	355,200
Corn, bus....	1,475,800	2,004,450	653,700
Oats, bus....	1,328,000	1,685,800	630,100
Barley, bus..	113,400	79,800	44,800
Rye, bus....	1,200	1,200	1,200

PHILADELPHIA—Reported by A. B. Clemmer, secretary of the Commercial Exchange:

Receipts		Shipments	
1926	1925	1926	1925
Wheat, bus..	2,131,036	1,281,852	1,010,132
Corn, bus....	30,910	43,121	.....
Oats, bus....	132,274	1,158,330	124,949
Barley, bus..	.....	54,440	73,379
Rye, bus....	6,045	4,824	.....
Flour, bbls..	188,406	204,567	10,682

ST. LOUIS—Reported by Charles Rippen, secretary of the Merchants Exchange:

Receipts		Shipments	
1926	1925	1926	1925
Wheat, bus..	5,699,400	4,240,600	3,501,713
Corn, bus....	1,331,800	1,895,400	1,019,010
Oats, bus....	2,356,000	2,602,000	1,498,000
Barley, bus..	121,000	208,000	9,600
Rye, bus....	61,100	76,700	22,100
Kaffir Corn, bus.	27,600	57,600	20,400
Hay, tons....	3,740	9,668	1,536
Flour, bbls..	577,750	520,220	551,943

SAN FRANCISCO—Reported by J. J. Sullivan, Chief Inspector of the Chamber of Commerce:

Receipts		Shipments	
1926	1925	1926	1925
Wheat, tons..	8,596	3,429	.....
Corn, tons....	3,920	7,300	.....
Oats, tons....	2,606	2,554	.....
Barley, tons..	36,807	103,661	.....
Bran, tons....	187	354	.....
Beans, sacks..	15,842	15,009	.....
Foreign Beans, sacks	10,394	7,946	.....
Hay, tons....	5,525	10,186	.....

SUPERIOR—Reported by E. W. Feidler, chairman of the

THE GRAIN MARKET SITUATION

By G. A. COLLIER,
Bureau of Agricultural Economics, U. S. Department of
Agriculture.

Good yields of wheat in this country and in Canada resulted in a decline in wheat prices during the latter part of August and early in September. The preliminary estimate of the Winter wheat production in the United States in the August report was much larger than indicated by the July forecast while private reports point to heavier yields of Spring wheat than were expected in this country and particularly in Canada. Export demand has been active at the lower prices while rains have interrupted the movement of grain to market. Generally favorable conditions for the growing corn have weakened the market for feed grains. Flaxseed prices declined sharply during the month in sympathy with lower quotations at Buenos Aires.

Increased production of wheat in North America has caused a moderate decline in world markets in the face of decreased production in European countries. Liverpool quotations worked about 5 cents lower during the month while Chicago futures declined about 7 cents. A decline of 9 cents at Winnipeg reflects the improved prospects for Spring wheat in that region. Spring wheat at Minneapolis declined more sharply than Chicago futures with No. 1 Dark Northern losing about 20 cents per bushel as prices worked to a new crop basis. Hard Winter wheat has worked slightly lower at the principal markets but Soft Winter wheat has been relatively firm.

Estimates and forecasts of European crops indicate that the production of wheat there is likely to be around 135,000,000 bushels less than last year's harvest. Rains have delayed harvesting and threshing in northern Europe and on the Lower Danube and the quality of wheat in some European countries is discouraging. Reports of a German wheat crop 10-20 per cent under last year's harvest were confirmed while the quality in general is described as poor. Private estimates of the Italian wheat crop run about 14,000,000 bushels lower than official figures. Turning to the Orient, the prospects for wheat in southern Manchuria are particularly poor while available estimates suggest that northern Manchuria may have 80-90 per cent of a normal crop. These decreased harvests indicate that those countries will take more foreign wheat than during the past season. Imports, however, may not be equal to the full shortage in production there unless prices are lower than last year or substitute feedstuffs are less plentiful in those countries.

Against this shortage in European countries the United States has a crop, according to August 1 conditions, around 170,000,000 bushels larger than the 1925 production while latest private reports indicate a Canadian crop as large as, or larger, than last year's harvest. The August report for the United States showed an increase of 72,000,000 bushels over the July forecast and private reports point to a good recovery in Canada from the less favorable conditions prevailing on August 1.

Early marketings of wheat this year were heavy and the movement reached its peak the last week in July, an unusually early date. Increased use of combines was a factor this season. Mill and elevator stocks, however, were low at the beginning of the season and the after harvest movement was readily absorbed for sometime, particularly as the quality of the new wheat was very good. Mills replenished their low stocks from this movement. Receipts at the principal markets for the first eight weeks in the season were nearly as large as for this period two years ago when the Winter wheat crop was also large. After mill stocks were replenished, however, commercial stocks increased more rapidly, rising 49,000,000 bushels during the two months compared with 34,000,000 bushels for this period two years ago. The bulk of the increase occurred in the month of August. Exports were also larger during July than in August.

EXPORT DEMAND GOOD

Stocks in importing countries have been low and though dealers have bought on a hand-to-mouth

basis considerable amounts have been required. About 40,000,000 bushels were exported during July and August compared with 13,000,000 bushels during the same period last year. World shipments for eight weeks in July and August total over 90,000,000 bushels compared with 66,000,000 bushels at this time last year and 86,000,000 bushels two years ago.

With an increased production of Soft Winter wheat this year, prices of this class of grain for a while declined below those of Hard Winter wheat. Recently, however, this wheat has turned firmer and premiums have increased slightly. Rains over a considerable portion of the area hindered threshing and lowered the quality of much of the wheat arriving at markets. This low grade wheat sold at sharp discounts at St. Louis but choice milling quality was readily taken.

Marketings of wheat have been moderately heavy in the Pacific Northwest. Mills have taken moderate amounts while exporters bought freely. Most of the export wheat is going to Europe but Oriental buyers have been active. Large amounts of wheat from southern Idaho are going to the Pacific Coast this year and storage space on the North Pacific Coast has become crowded.

Farmers intended to increase the acreage of Winter wheat 9.7 per cent this fall, according to reports received by the Department from 24,000 farmers as of August 1. Under average conditions this would mean somewhat less Winter wheat, however, than this year's harvest since the yield this year is highest since 1914. If an average crop of Spring wheat is also secured next year wheat prices are likely to remain upon an export basis. Probabilities are that the wheat situation will be about the same for 1927-28 as during the present season, so far as it can be determined at this time.

CROP CONDITIONS WEAKEN CORN MARKET

Corn prices declined during the month chiefly on account of more favorable weather conditions for the growing crop. Rains and hot weather over a large part of the Corn Belt favored the growth of corn and private reports suggest a material increase over the Department's forecast of 2,577,000,000 bushels. The crop, however, is still late over a considerable area and dealers in some sections were becoming concerned over the moisture recently received, stating that dry weather instead was needed to mature the crop.

Demand for corn has been of only fair volume. Receipts have been small but commercial stocks are the largest on record for this time, although they have declined slowly since the last of June. Fair amounts have gone to feeders and to industries. Large quantities have been shipped from Omaha and other western markets to the Pacific Coast but recently demand from this source has been small. Argentine corn is competing in Canada with offerings from this country and at the end of August there were about 172,000,000 bushels of Argentine corn in eastern Canadian elevators. Good crops of feed grains in the Southwest were cutting off the demand from that territory this year.

Oats prices declined with corn. Production this year seems ample for domestic needs, particularly in view of the large amount carried over on August 1 but the arrivals at a number of markets have been of light weight and have shown the effects of recent rains. Damp oats have generally sold at material discounts.

Barley prices have been irregular. Rains affected the quality of the receipts at central western markets. Best malting grades were readily taken but damp grain sold slowly at heavy discounts. Fair amounts of central western barley have been sold for export.

Rye prices declined with wheat although recently this grain has shown independent strength. Offerings at Minneapolis were being taken readily by mills but receipts at Kansas City were going to exporters. Commercial stocks of rye are nearly twice as large as at this time last year but the production is smaller although it is not equal to domestic requirements. European crops of rye,

however, are much smaller than a year ago, suggesting an improved export demand for this grain. Wet weather was delaying the harvest in Germany and the Scandinavian countries and the German crop is considerably smaller than last year.

Flaxseed prices declined sharply about the close of August. Prices at Buenos Aires also declined at this time. The United States crop is forecast at about 3,000,000 bushels under last year's harvest and is considerably smaller than the domestic needs. However, there is much more flaxseed remaining in Argentina than at this time last year while the acreage in that country was slightly increased.

The movement of flaxseed in the United States was getting under way and around 550 cars were received at Minneapolis during the week ending September 4. Crushers absorbed the offerings and quotations were running 1-1½ over the Minneapolis September future.

MILLING QUALITIES OF WHEAT

That hard, vitreous kernels of wheat have superior qualities for bread making when compared with the starchy grains of the same class of wheat is indicated in a series of tests recently made by J. H. Shollenberger and D. A. Coleman of the United States Department of Agriculture. Wheats of certain classes containing a high percentage of such kernels usually command a premium over the price paid for the yellower and more starchy appearing wheats of the same class, because it is believed generally that the hard, vitreous kernels have superior bread-making qualities. This belief was recognized when the official United States Grain Standards were promulgated and the percentage of hard and vitreous kernels was taken as the basis for establishing subclasses for the Hard Red Spring, Hard Red Winter, Durum, and White wheat classes.

To establish definitely what relationship exists between the kernel texture and such important factors as test weight per bushel, flour yield, loaf volume of bread, water absorbing capacity of flour, and protein content, special studies were undertaken. Samples of Hard Red Spring, Hard Red Winter and Durum wheats were separated into three types of kernels: Dark, hard, vitreous, or amber; spotted or mottled; and yellow or starchy. Each was milled and tested for the various qualities.

The results showed that of the three types of kernel texture compared, the dark type, for each class of wheat, was consistently highest in specific gravity, usually highest in flour yield and color of loaf, decidedly superior in water absorption, weight of loaf and crude protein content, and slightly higher in ash, crude fiber, and acidity. In the Hard Red Spring and Hard Red Winter wheats, but not in the Durum, the dark type of kernel was also slightly highest in loaf volume and texture of bread.

The starchy kernel type was slightly superior in average fat content of wheat and in bran yield for all three classes of wheat tested, and in the Durum wheat samples produced bread of the greatest volume and of best texture. In almost all the important milling and bread quality factors the starchy kernels, except of the Durum wheat, were inferior to the other types.

Judged from the standpoint of these averages, it would appear that the dark kernels are decidedly superior to the other types of kernels and that the starchy kernels are just as decidedly inferior. Complete details concerning the tests and results are given in Department Bulletin No. 1420-D, "Relation of Kernel Texture to the Physical Characteristics, Milling and Baking Qualities, and Chemical Composition of Wheat", copies of which may be obtained, as long as the supply lasts, by writing the Department of Agriculture, Washington, D. C.

THE French Minister of Agriculture, during the course of a debate last month, estimated the 1926 wheat crop at 279,224,000 bushels and the rye crop at 23,622,000 bushels. Milling centers where foreign wheat is available are already incorporating 10 per cent foreign wheat in their flour.

Hints for the Elevator Millwright

"Big Bill" Davis Shows How Speeding Up An Elevator Does Not Always Increase Its Capacity

By JAMES F. HOBART

"WON'T you come over to my place and look over the elevator legs? We have to have a little more capacity and the millwright speeded up two of the legs, with result that one of them handles just a bit more material than before while the other leg will not handle as much. Wish you would come over for a few days." It was Mr. Slocomb talking to Big Bill Davis, the millwright.

"All right, Mr. Slocomb, reckon I can go with you. Things are quiet here just now, and Mr. Marston writes from the Square Deal Elevator that things are running smoothly there. I'll go with you to Salisbury right now, and we'll see what we can do with your elevators."

"Here we are, Mr. Davis, and here are the elevators," said Mr. Slocomb when they got to the elevator. "See what a dust they pick up! They didn't do that before the millwright speeded them up. Why should they do so now?"

"Those elevators, Mr. Slocomb, are both 'blowing' like all get-out. That's why they make so much dust," answered Bill Davis. "They have been speeded up until the shape of the buckets used will not let the material discharge while passing over the head pulley. Consequently a lot of stock is carried down the return leg of the elevator, throwing into the air all the dust which can find its way out of heads and legs, through whatever leaks there may be, and from the dust which gets loose there must be leaks aplenty!"

"How does speeding up cause an elevator to 'blow' anyway?" asked Mr. Slocomb.

"It will not, provided the shape of the buckets is such as to permit a high belt speed, but you will probably find that these buckets are pretty high in front, aren't they? That being the case, the buckets pass around or over the head pulley with such speed that the contents of the bucket are nearly all held by centrifugal force against the front side of the bucket, so that most of the material is not released until centrifugal force ceases at the point where the bucket begins its direct downward movement, after passing over the head-pulley until the belt leaves that pulley to begin its downward travel.

"It's this way: Centrifugal force begins to act the instant the bucket commences to leave the straight line of upward motion and to curve over the upper side of the head pulley. At this point, when the speed is too great, such material in the buckets as may be heaped up between the front and back of the bucket and is not prevented by the front from being thrown off is discharged tangentially from the bucket, beginning immediately the straight upward movement is ended. Such discharge continues, during the over-pulley movement, until the loose, surcharged material has been thrown off and that portion which falls into the delivery spout alone represents the capacity of the elevator at its increased speed.

"Some of the centrifugally discharged stock falls back down the 'up' leg of the elevator, but most of the material, being held in the bucket by centrifugal force during the over-pulley passage, is only released when the bucket begins its direct downward movement again. Then, that material falls down the return leg of the elevator, and 'blowing' and dust are troublesome happenings."

"Well, how is a man going to tell when an elevator is running at its best speed, and how do they rig these 'high-speed' elevators which we read about?" inquired Mr. Slocomb.

"It's this way, Mr. Slocomb. The engineers have ways of calculating those things from the size and shape of a bucket and the diameter and speed of the elevator head pulley. But, we plain mill folks, who don't understand algebra, geometry and calculus must dope out such things by actual trial. It is not an expensive job to rig up a little test machine which will show directly the speed at

which any shape of bucket will do its best on any given diameter of head pulley."

TESTING ELEVATOR BUCKET DISCHARGE

"Place a pulley of desired diameter on a piece of shaft and rig it to be driven at any desired speed. This may be done by using different sized pulleys for different speeds, or by borrowing from your machinery dealer, a Reefes variable speed drive, for the time of making experiment. Failing in these methods—through not being able to secure the necessary pulleys, a pretty good makeshift variable speed drive may be rigged up by placing tight and loose pulleys on the experimental head shaft, which will require but little power and may be driven by a belt two or three inches wide.

"Rig up a belt shifter by means of which the driving belt may be held at any point, partly on both tight and loose pulleys. Then by arranging the belt shifter, the belt may be made to drive the experimental shaft at almost any desired speed, the belt slipping on the tight pulley a certain amount at each slow speed. Borrow an automobile speedometer from a garage, attach it to the experimental shaft, and by means of the speedometer, you will know when the shaft is running steadily at a certain speed which may be determined with a revolution counter and then a simple calculation will show from 'miles per hour' on the speedometer, the number of R.P.M. made by the experimental shaft. This will enable you to hold the shaft-speed steady, and thus you will be able to duplicate any test at will.

"Wrap a piece of old belting around the experimental head pulley, then space the piece of belt for elevator cups, which may be attached to the piece of belt at distances apart to correspond with the cup-distance of any elevator, the performance of which you desire to test out with the apparatus described above. Replace the piece of belt after the cups have been bolted in place, wrap some stout string or small cord around the head pulley and the cup-covered belt, to be thus held in place upon the experimental elevator head.

"Build a box or trough under the head pulley, deep enough to hold a few bushels of grain, of any kind with which the elevator buckets are to be tested. Build the trough inside of the shaft bearings, then flare out additional sides and ends of the trough, which may be built five or six feet high—as may be found necessary, to prevent any grain from being thrown out by the head-pulley while it is running. The sides and ends may be rigged up of boards, sheet metal, or cloth or building paper. Something which will prevent grain from being thrown around by the head-pulley and buckets during test periods.

"When ready to make a test, run into the trough a small quantity of grain, putting in only enough that the elevator cups dip into the grain and fill. There must be grain enough for this purpose, including the amount which in 'in the air' during a test. Bring the head-shaft to the desired speed, and hold it there by means of the speed varier and the speedometer. Then, watch the action of the elevator cups, and note how full they come up, how they discharge, and how much material, if any, is in them when the cups get down past the center of the pulley. Note the throw of the grain from the cups, and if you desire, a templet of the regular elevator discharge spout may be set up beside the experimental head, and you will be able to see at once, how much material goes down the delivery spout, how much falls down through the 'up' leg, and how much material would fall down through the return leg of the elevator.

"Next, change the speed of the test device and note the delivery action of the cups under the new conditions. Make tests at various speeds, until you find that at which the cups in use will send

the greatest volume of material into the delivery spout. Once that speed has been determined, change the speed of the real elevator, until it runs at the same rate, and then you will be getting out of your elevator, all the work possible from the kind and make of cups used."

SOLDERING ELECTRIC LIGHT WIRES

Mr. Davis noticed some workmen running some new lighting circuits, and using conduit to contain each and every wire they put up. At all the junction-boxes, and whenever two wires had to be joined together, the workmen soldered the connections thus made. They did not have an electric soldering copper, which is certainly the best tool to use for soldering purposes in elevators or flour mills, and they were forbidden to take their fire-pots into the elevator building for heating soldering coppers. Gasoline blow-torches, and all other open-flame sources of heat being forbidden, the workmen were up against it when it came to heating the soldering coppers—and keeping them hot long enough to solder a lot of wires.

The workmen used to heat a copper outside of the elevator building, then a workman would run with the tool, as fast as possible, to the place where the soldering was to be done, and, if he had good luck, the man at the job could solder a wire or two before the copper would have become too cold for doing good work.

Finally, one of the millwrights hit upon the trick of melting a lot of lead in a big ladle, and when nearly red hot, the ladle and its contents, well covered with forge-dirt, with several soldering coppers stuck in the lead, would be carried into the elevator, and a considerable number of wires could be soldered before the lead became cold enough that it would not reheat a soldering copper when one was thrust into the molten metal.

As there was a good deal of soldering to be done, and many wires to be put in place, Mr. Davis made the suggestion that a plumbers' "wipejoint" melting pot and ladle be procured and comfortably filled with melted "half and half" solder. The pot and its contents were more easily taken into the elevator than the awkward ladle, and Big Bill showed the men how to dispense entirely with soldering coppers, in doing the wire work. He cut the insulation from about four inches of a 12-inch piece of heavy quarter-inch insulated wire, but left the insulation on the remainder of the piece of wire and bent the insulated end of the wire into an "eye" about an inch in diameter. Mr. Davis "tinned" the bare end of this bit of heavy copper wire, and made use of it in soldering, instead of the usual soldering copper. The "soldering wire" was kept hot in the melting pot.

Bill Davis showed the workmen how to prepare the wires for soldering, by bending down their ends, or bending down a loop, if there were no exposed ends. Then, he would dip up the little ladle comfortably full of melted solder, scatter a little rosin on top of the solder in the ladle, and at once, raise the little ladle—about an inch and a half in diameter—up so the wire ends or loop went into and under the melted solder in the ladle. Upon withdrawing the ladle in a few seconds, the wires were usually found well coated and soldered. But, if not, then the little soldering wire was taken from the pot and the wire splice rubbed while in the ladle, with the end of the soldering wire, with result that the solder quickly coated the joint to be soldered.

He told the head millwright, that if he could not get a little ladle, to take a one-inch and a half pipe cap; drill and rivet a handle thereto, and use the cap as a ladle, for wire-soldering. Mr. Davis further stated, that for almost any regular job of soldering in elevator or flour mill, the melting pot, well filled with solder and a couple of coppers placed inside the pot with the solder, could be heated outside of the building, carried in, and any ordinary job of spout soldering done before the melted solder became too cold to properly heat the coppers which were thrust into it. This treatment, he said, would also keep the coppers nicely tinned, and by having two coppers, one could be used, while the other copper was being reheated in the pot of melted solder.

Mechanical Perfection Attained in Indiana's Largest Elevator

**Beech Grove Elevator of the Early & Daniel Company Leased for
Six Months by Soft Wheat Association**

By H. W. RUDEAUX

SIX miles southeast of the city of Indianapolis on the Big Four Railroad stands the largest elevator in the State of Indiana which was built by The Early & Daniel Company of Cincinnati, Ohio, with a capacity of 1,054,000 bushels. The house will be operated under the Federal Merchandising Act with Fred H. Hoffman as manager and Carl Berger as the mechanical superintendent. The entire capacity and storage has been leased for a period of six months by the Central States Soft Wheat Growers Association, formerly known as the Indiana Wheat Growers Association. The structure was designed by Bacon & Tislow, engineers, of Indianapolis, Ind., and constructed by the R. C. Stone Construction Company, St. Louis, Mo. The storage is divided among 53 concrete tanks ranging from 12 feet in diameter to 23 feet; 112 feet high from bin slab to under side of roof, with a full basement 54 by 270 feet and seven feet deep. A gallery 15 feet wide runs the full length on top of tanks.

One of the striking features of this new elevator is the construction of the Randolph Drier. This is built in one of the 23-foot diameter tanks with capacity of 1,000 bushels per hour. It is entirely cut off from elevator and headhouse, with all entrances from the outside. This was done as a precaution against communication of fire from drier to headhouse or storage. Over this direct heat drier is constructed a 6,000-bushel garner bin and scale, and a 6,000-bushel garner bin under the drier in order to render unnecessary the operation of leg until 6,000 bushels of grain have been dried.

The headhouse is 25 by 36, and 204 feet high. The elevator head floor has two 2,000-bushel garner bins over the two 2,000-bushel Type S Fairbanks Hopper Scales. There is a distributing floor with eight 2,000-bushel bins over the cleaner floor, and eight 2,000-bushel bins under the cleaners. A working floor is at ground level and basement as well as two concrete legs, stair tower, and freight and passenger elevator combined.

The grain is unloaded from cars into two exceptionally large hoppers extending along two 48-foot tracks and unloading is facilitated by the use of two power grain shovels. The hoppers are protected by a steel and galvanized iron shed 42 by 50 feet long, under which is located the dust house, which is 16 by 48 feet. Delivery from pit to elevator boots is by a belt conveyor 42 inches wide which discharges into either of the two main elevators 12,000 bushels hourly, which in turn deliver to the garner bins over the scales. In every department, the mechanical equipment is the best that money can buy.

Grain may be sent from scales direct to cars or to any of the bins over the cleaners, or to a 36-inch belt conveyor in the gallery delivering to any bin in the storage. The main tanks are provided with 20-inch diameter hopper openings to which are fitted Nordyke and Marmon special designed bin bottoms having 14-inch round discharges, the slides operating on rollers, the whole bin bottom being easily removed to permit entrance of workmen for cleaning and ventilating. These bin bottoms discharge into a 36-inch belt conveyor in basement which in turn delivers to either of the elevator legs which are of concrete with heavy galvanized iron heads.

On the cleaner floor is located a 6,000-bushel per hour, two-stream Monitor Separator and a 1,500-bushel per hour Monitor Oat Clipper, under eight 2,000-bushel supply bins, with eight 2,000-bushel receiving bins below them, which in turn discharge into either of the two elevator legs. A 12-car capacity car puller is provided for spotting cars. It is located between the two tracks in a protected pit. Motor driven dust collectors for cleaners are

suspended on outside of building at cleaner floor line and dust spouted from them to dust house across the unloading tracks. The leading out track is located on the east side of building, but all tracks are provided with loading out spouts with a combined capacity of 20,000 bushels per hour.

The mechanical equipment is motor driven each unit separately, comprised of 13 motors of Fairbanks Morse make, totalling 500 horsepower. Each elevator head shaft is driven by one 125-horsepower enclosed, slip ring ball bearing motor, connected to countershaft by Link-Belt Silent Chain in connection with Sykes Type Herringbone Speed Reduction Gear Set, and equipped with a Weller Roller Type Back Stop.

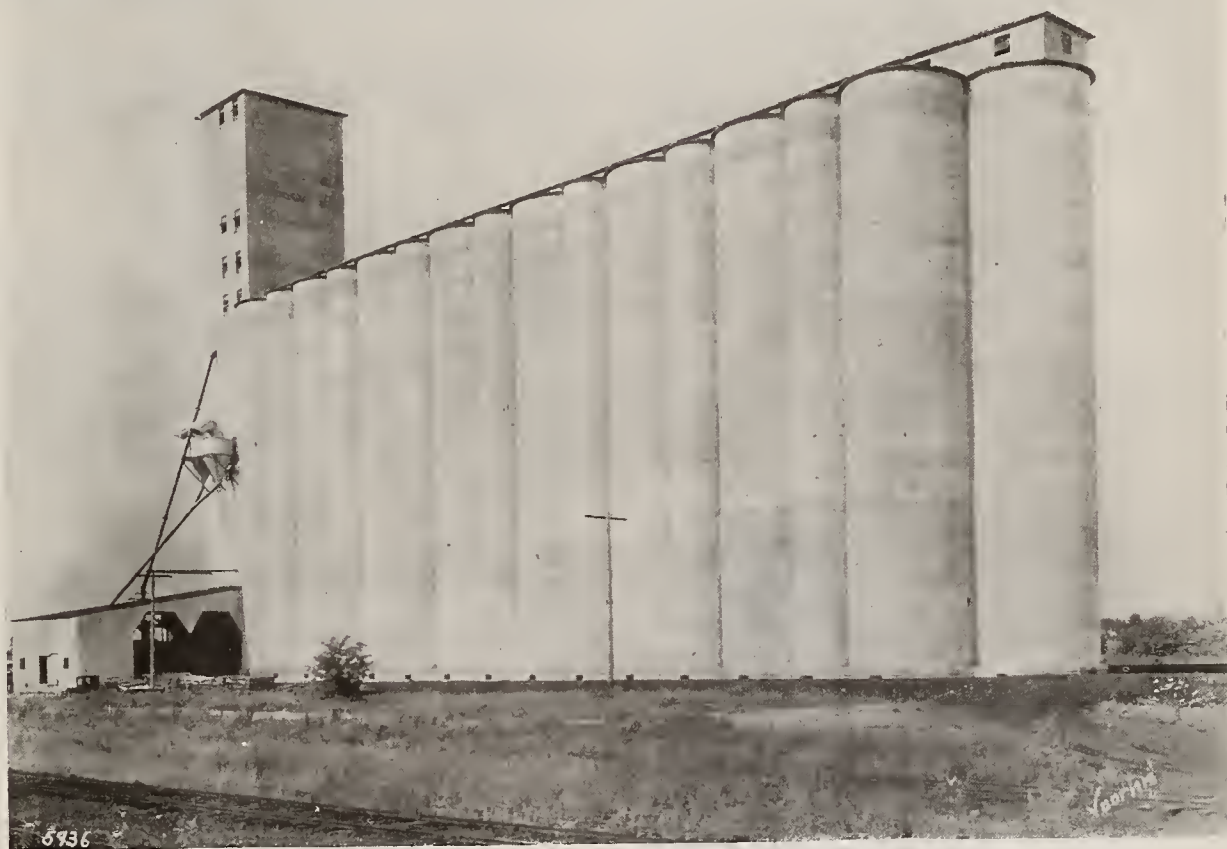
The double automatic power grain shovels are of the Nordyke & Marmon type; they are located in un-

them, and the skill of the engineers and builders the new elevator has a quality of design and construction that makes it a distinct achievement.

The Early & Daniel Company has been prominent in the grain trade for many years, and by consistent fair dealing the partners have built up a prestige which affords them an excellent though intangible asset. The combination of this good will with the mechanical perfection of the new plant should assure continued success after the termination of the present lease.

THE GRAIN WORLD

"Farmers and grain dealers are awakening to the realization that the Roumanian railroads are not in a position to move any large quantities of grain for export," reports the Department of Agriculture. "Under the prevailing shortage of locomotives and freight cars an authority on Roumania's grain situation says that 'three-fourths of Roumania's exportable surplus will not be moved out of the country, and there are no storage facilities in the country.' It is also pointed out that corn from last year's crop has been lying for months at the railroad stations, some not far from the ports. It



NEW ELEVATOR OF THE EARLY & DANIEL COMPANY NEAR INDIANAPOLIS, IND.

loading shed above car clearance line and driven by separate motors. All motor equipment is provided with automatic starters located in a dust proof room on the working floor with additional start and stop buttons located at each motor. All electric wiring for power and light is enclosed in iron conduit. The headhouse is equipped with an electric signaling system for communication of workmen. All garner bins, elevator heads, scales, and each storage bin is ventilated through galvanized iron ventilators direct to outside to permit dust to escape. All bins are equipped with Zeleny Thermometers so that the condition of grain can be seen at all times. The entire equipment was furnished by Nordyke & Marmon Company.

This latest elevator of the Early & Daniel Company, at Beech Grove, near Indianapolis, Ind., is one of the titan storage units in America. It is of such huge proportion that it is almost impossible to compare it with the first storage plants erected by that company. No review of the current history of this firm is adequate, however, that does not give due consideration to the past experience of these partners. It is a built-in part of the new equipment. In the past, errors have been made. But they have served as an educative force. Through

is considered extremely doubtful if the Railroad Administration could furnish the 2,000 cars daily to move out of the country as much as 2,000,000 tons of grain. If this turns out to be the case there will be considerably less Roumanian grain in the way of the American product on the European markets this fall and winter than has been anticipated."

* * *

The Czechoslovakian Government is insisting that our consuls issue certificates guaranteeing origin of direct shipments of American grain and flour into the country, according to a cable sent by James F. Hodgson, commercial attache at Prague. The authorities contend that Chambers of Commerce are incompetent to perform this service.

* * *

The first official estimate of the 1926 wheat crop in Italy is 205,744,000 bushels, which is 35,000,000 bushels below last year's record, but is well above the average for the 10 years from 1916 to 1925, of 180,107,000 bushels.

* * *

Crop prospects in Esthonia are reported as "very unsatisfactory." The forthcoming crop is estimated to be below the average of the last 10 years. The

winter crop is middling, but the summer crop is exceedingly bad. The drought has badly effected the flax fields so that the yield will be much below medium, according to a communique emanating from Carl J. Mayer, commercial attache at Riga.

* * *

The harvest in Denmark is reported about two-thirds completed, but weather is very unfavorable. Indications point toward a normal or slightly better yield, although early crop estimates were apparently too optimistic.

* * *

Large shipments of grain from Russia have been arriving in Latvia lately. A consignment of 163 carloads arrived at the frontier during the early part of August in one week's time. According to latest information, Russia is endeavoring to export much more grain this coming season.

* * *

In Poland, the export duty of 15 zlotys (about \$1.60) per 100 kilos (220 pounds) on wheat has been cancelled. In view of favorable harvest prospects stocks are considered sufficient to fill domestic demand and leave a possible surplus for export.

* * *

Commenting on the harvesting of the wheat crop in Canada, Lynn W. Meekins, trade commissioner at Ottawa, is quoted in *Foodstuffs Round the World*, by the Department of Commerce, as follows:

Some concern is being felt because of the apparent lack of available labor to harvest the wheat crop. The Prairie Provinces have asked for 50,000 men and up to this week not more than 10,000 have gone west, although harvesting operations are well under way. The reluctance of eastern Canada labor to take part in this work is attributed to the improvement in general employment throughout the Dominion, owing to the increased activity of industrial plants, the expansion of building operations and other demands.

HELPS HANDLE CROP IN SOUTHWEST

With the growth in importance of the Southwest in the grain world has come the need for keeping pace on the part of the elevators. It has been reported, for instance by one of the markets of the



WILSON & SON'S ELEVATOR AND SIDING, LA HARPE, KAN.

Southwest—Wichita, to be exact—that if all plans new under consideration are carried out, its storage space for wheat may be doubled within a year. These increases are attributed largely to two important factors: The rapid growth in the use of harvester-threshers and the rise in southwestern grain production along with increased milling activities.

Necessarily, the facilities for handling grain in the country acquire an added importance, since the terminal houses cannot operate unless the next link in the marketing chain—the country elevator—is ready to carry its share of the burden. Among the country houses which are doing their share in Kansas is that of Wilson & Son, located in La Harpe, Kan.

One of the pictures on this page shows the warehouse and office of the concern, and it will be observed that they have a neat and compact appearance. This unit measures 80 feet in length and 25 feet in width and has been constructed of hollow tile. The elevator proper, which is shown with its railroad siding in the other illustration on this page, is a wooden structure which is covered with

iron. It has a capacity of 20,000 bushels of grain. All bins have been built flax tight.

There is a wagon scale of the latest model, of the ball-bearing type, and the business also requires the use of an up-to-date two-ton truck. The elevator equipment includes a Great Western Cleaner and Sheller, and while the grinder has not yet been installed, it will soon have been added to the quota of equipment. The building faces toward the west, and the scales and dumps are on the north side, with facilities for loading and unloading provided by the dock on the south side.

Mr. Wilson states that while the 1925 corn crop in his area was only a fair one, the 1926 flax crop was the best in 25 years; "and with a big rain



WAREHOUSE AND OFFICE OF WILSON & SON

last night," he adds in his letter of August 20, "our corn and kafir crop will be good." The business includes the handling of grains, implements and seeds chiefly, as well as other sidelines.

ILLINOIS MERGERS

The Illinois Agricultural Association's new "country plan" for the federation of farmers' elevators, is termed by it "a definite step forward to more efficient grain marketing." The plan proposed to seven farmers' elevators in Iroquois County provides for the operation of the elevators under one management but with each individual elevator maintaining itself as before. There will be no pooling of profits or interests, contrary to mis-statements made elsewhere heretofore.

All sales will be made through the operating company, and the prices to be paid at the different receiving points will be determined by the Board of Directors of the federation. But there is no provision for the assumption of losses of one elevator by another.

The plan is not meeting with unanimous approval, but it will be given a tryout in several districts.

BARGE IS WEDGE OPENING GRAIN EXPORT MARKET

A reawakening of the Middle West's wheat export trade, after a year of dormancy, was signalized by the shipment in Federal line barges, from August 1 to 15, of 374,698 bushels. New Orleans, La., was the destination of the St. Louis cargoes. That fortnightly volume is more than the movement in any one month for more than a year previously. The saving effected by shippers was \$14,613, considering the margin between rail and river rates.

Along with the wheat went 108,000 bushels of corn at a rate saving of about \$3,960. The freight rate saving by barge line is a considerable factor in maintaining this margin for transportation, and affects grain prices to farmers as far west as the Missouri River. It enables exporters to offer attractive prices to their sources of supply and still keep the selling prices low enough to compete in foreign markets.

FARMERS LOSE ON POOL

The *Hoosier Farmer*, the official organ of the Indiana Wheat Pool, in its issue of September 1, 1926, stated the settlement for the 1925-26 crop was just made, at \$1.415 for average net price on No. 2 basis. The issue prior to this last one carried a statement

which it credited to the *Indianapolis Star*. This statement as published gives the average monthly buying price by country elevators as follows: 1925, July, \$1.457; August, \$1.525; September, \$1.53; October, \$1.498; November, \$1.576; December, \$1.667; 1926, January, \$1.748; February, \$1.692; March, \$1.521; April, \$1.585; May, \$1.50; June, \$1.38. Average for year: \$1.565.

The difference in the two statements, says Secretary Riley, of the Indiana Grain Dealers Association, seems to favor those who sold their wheat direct by a margin of 14 cents per bushel, plus the interest or value of the money paid at delivery, as this amount paid by the pool was not all paid until September 1, 1926, according to the report published in the *Hoosier Farmer*.

POOL HEDGE REPORTED

Rumors still persist in the Chicago and New York grain markets, that the Canadian Wheat Pool is hedging on a liberal scale. No one claims that he is in possession of the detail of hedging volume to date, but it is said that the pool is hedging in December delivery,—that is, selling for December delivery against its new crop holdings, which must approach two-thirds of the prairie wheat crop.

Traders who prefer to believe that the pool rather than make cash advances to its members, should protect itself by a cover up in a distant month, point out that by so doing the pool would maintain its present position should the market decline, and that by buying its hedges when it sold cash wheat, it would even up.

Rumors of somewhat similar purport a year ago were discredited in informed quarters. It is conceded the pool position is stronger than it was then. Its attitude or policy of averseness to hedging is not known to have undergone any real change, and its initial cash advance of some 75 cents basis Fort William, gives it instantly a cash equity of many million dollars in the wheat of its members.

BORER BOOTLEGGERS HALTED

Autoists traveling by night along highways in northeastern Indiana are now being halted by uniformed guards, as a result of the recent invasion of the European corn borer from the infected region around Lake Erie. Bootleggers and innocent tourists alike are being stopped by official inspectors, who have orders to search every car leaving the borer infected territory to see that no corn is carried over the quarantine line.

Stalks and ears may appear to be perfect and yet carry dozens of the worm-like corn borers—the worst crop pests that have ever been brought into this country.

European corn borers have been found this year for the first time in at least four northeastern Indiana counties, including Steuben, De Kalb, La Grange and Allen. The pest is traveling so rapidly despite the extra precautions taken that entomologists expect it to be in interior counties within another year, which would put it within 50 miles of Illinois fields.

No serious loss is expected in corn this season, but the corn borer has caused alarm among Hoosier farmers who are getting ready to change their cropping and livestock system to meet the emergency.

GRAIN DUST RUNS AUTO ENGINE, TEST REVEALS

Grain dust obtained from a grain elevator has been found to have sufficient explosive power to run an automobile engine. Department of Agriculture chemists announced on September 10 that while the engine did not make any prolonged, continuous run, enough power was developed with the dust to turn it over many times.

A hand system of feeding the dust through a tube to the intake valve was employed, says an Associated Press dispatch. The experimenters said the study gave "encouraging results, which indicated the possibilities of designing an engine to use grain dust as the source of fuel."

Methods in Management of the Farmers' Elevator

An Analysis by an Elevator Manager of the Effects of Storage, Hedging and Speculation on the Farmers' Elevator

By VERN L. MARKS*

THE PHASE of the farmer elevator problem which I have been asked to discuss is the "Effects of Storing, Hedging and Speculation on the Farmers Elevator". This has been, and is, one of the most difficult problems the farmers' elevators have had to solve, and the success of the individual company is measured by its ability to solve these things.

First, we might define "farmers' elevator". It is a company of farmers organized for the purpose of handling grain and other commodities. It hires a manager, places him under bond, supplies him with funds or credit, an elevator, and gives him authority to run the business with such restrictions as it may place upon him. Some directors of co-operative companies do not permit storage, hedging or speculation. Others may permit all three. Assuming that a manager may be given complete authority, the question then to be answered is, "What are the effects on a farmers' elevator of storing grain for farmers, hedging grain that he ships out, or speculating on some Board of Trade, or upon grain he handles through his elevator?" Storage of grain at country points, when conducted in a business-like manner, is perfectly legitimate.

The storage of grain at country points may be divided into two different classes: First, storage of grain that belongs to the company and second, storage of grain that belongs to the individual farmer. Concerning the first: The average farmers' elevator has a capacity of 25,000 to 35,000 bushels. Some of the larger ones have 50,000, but none of them has sufficient storage capacity to hold large quantities of grain and still have working space to handle current deliveries from farmers.

Storage may be the source of considerable income if handled properly. Whenever there is a fair carrying charge between the price paid for grain and some future delivery month, the elevator company can buy the grain and sell an equal amount for future delivery, providing, of course, that the element of risk is not too great. The grain must be sound and dry and the future should be enough higher than the cash grain in the house to protect it against shrinkage, ramage, insurance and interest on money. Assuming that you have 10,000 bushels of oats sold for May delivery, it frequently happens that some time during the winter months, No. 3 White oats advances to the May price. When this takes place, your cash oats in your house should be sold and the 10,000 bushels of May oats should be bought in. In a general way this principle applies to wheat and corn.

Concerning class No. 2, or storage for farmers. It may be necessary at times to store small quantities for farmers, but the system is bad. A farmer should have sufficient storage on his farm. The average farmer elevator scarcely has room for its own requirements. When it is found absolutely necessary to store, then in no case should there be free storage of grain. If money is advanced on stored grain, then, in my opinion, the carrying charge should be approximately 1½ cents per bushel on oats per month, and two cents on corn and wheat, and in no case should grain ever be stored which could possibly heat or deteriorate in any way.

One of the greatest evils that has grown up in the modern grain trade is the free storage of grain. Free storage became a practice when the old time margin, or profits of four cents to seven cents per bushel was more than sufficient for the line house or independent dealer to carry the grain until the farmer desired to sell. During the early days the renters were obliged to sell irrespective of price as soon as the grain was available for market. As

the communities became more independent and were not obliged to sell at once, they continued the practice of hauling grain to the nearest elevator for storage. The farmer has come to realize that he has paid very dearly for allowing his grain to be stored "free", as this service between the elevator owners is always a reflection in the ultimate price. Unless a manager has positive instructions to store grain, but instead is permitted to work out his own salvation, then I would say most emphatically that it is not in the province of a co-operative grain company to store grain; and that in the long run both the company and the farmer would ultimately benefit by this policy.

The expression, "hedging" is complex as compared with the other two topics, "storage" and "speculation". Volumes have been written on this subject, and I would not, therefore, attempt to either analyze or define the word, but shall confine myself very largely to its effect on the farmers' elevator. Hedging has been called an insurance, but in this I can scarcely agree, as it lacks the positive elements of insurance. Those who use hedging in the large grain centers and claim it to be necessary, realize that it has its faults and uncertainties. It is not a cure-all by any means, and unfortunately that which you learn today in applying your business to success, may be of little value with conditions that exist tomorrow. Hedging is not speculation. In fact, it is intended to be the exact opposite, or a protection against speculation.

The practical workings of a hedge must, of necessity, be accomplished on some Board of Trade. That is, the manager of the farmers' elevator at Smithville buys from a farmer 5,000 bushels corn. He hedges by selling 5,000 bushels corn for future delivery on some Board of Trade. When he sells out his cash grain or the grain he has bought from the farmer, he buys in the 5,000 sold on the Board of Trade, and therefore, any marked fluctuations in grain values during this interim have been equalized through the operation of the hedge. That is, if an advancing market shows a profit on the grain that he has bought from the farmer, it is presumed that there will be an equal loss on the Board of Trade transaction. In the meanwhile, he has had an insurance or protection. This is legitimate and proper.

Unfortunately, however, it happens far too often that the manager does not take off his hedge immediately upon selling out his cash grain and this brings us up very quickly to the third topic, "speculation." If the practical working of a hedge should introduce the desire of speculation, which, unfortunately, it has done in many cases, I would be opposed to hedging. In fact, in my opinion, it is not in the province of a co-operative grain company or its manager, or in fact any of its officers, to buy and sell grain on a grain exchange merely as a speculation. Those companies who have speculated, have almost universally lost and it is safe to say that a very large percentage of failures among country grain dealers in the past has been due to speculation. This does not refer to the carrying in your elevator, moderate stocks of grain which are bought and sold in the usual conduct of your business, but rather the speculation on Boards of Trade. While the carrying of stocks of grain may be considered as a phase of speculation, yet the declines and advances, the profits and losses equalize themselves over a term of years.

In closing, I will say that the best policy for the farmers' elevator to follow, is that which you were organized to do, merchandise grain, see that your margins are sufficient to allow you to properly conduct your business, paying overhead and enabling you to return to the farmer a reasonable return on his investment.

MAKING GOOD

A Milwaukee man, a grain dealer who was much in the lime light for some years, has amazed grain dealers of that city by paying up a long string of debts, totalling nearly \$200,000, after he had gone through bankruptcy in 1915 and discharged his obligations up to the limit of his capacity.

Now, after 11 years, the last of the debts have been paid. Many of the creditors who have been paid in full are members of the Milwaukee Chamber of Commerce now. Deducting the \$12,000 paid at the time of the bankruptcy, some \$188,000 was paid by Mr. Glavin beyond the legal requirements.

In 1914 Mr. Glavin was a heavy buyer of grain. He was caught in a falling market and the next year he failed, being swamped by his obligations.

After paying 6 cents on the dollar in bankruptcy proceedings, he kept careful account of all debts unpaid and he and an associate went to Argentina, where in Buenos Aires he opened an office buying grain on his own account and selling to millers. The big demand for grain in Europe during the war boomed the Argentine market and Mr. Glavin amassed another fortune.

Five years ago, he started to make installment payments on his remaining debts to those who lost in his failure. There were 43 creditors in Milwaukee and many in Chicago, Minneapolis, Manitowoc and Mankato, Minn.

After his financial success in South America Mr. Glavin with his family returned to the United States in 1919. In that year he avowed his intention of paying his obligations in full.

"Forget it", was Mr. Glavin's terse comment when asked for a statement as why he had done this extraordinary thing. "I would rather have nothing said about it, but it is a relief to have the matter all settled. From the time of my failure it was the chief ambition of my life to pay back those debts. Consequently, this is one of the happiest days of my life."

"You have performed an unusual and highly creditable act," wrote Harry A. Plumb, secretary of the Milwaukee Chamber of Commerce by order of the directors of the exchange. "It is an outstanding example of placing the honor of your name above all other considerations."

"The action of Mr. Glavin in paying debts he did not have to pay is the most creditable act in the history of this exchange", declared J. M. Riebs, Jr. who is also a member of the Chamber of Commerce now.

PRICKLY LETTUCE

Prickly lettuce is now appearing in the small grain and Clover fields of western Ohio and promises again to become a serious weed pest as it was some 30 years ago.

This weed, according to Dr. Freda Detmers, assistant botanist at the Ohio Experiment Station, was introduced from Europe and made its first appearance in Ohio at Toledo in 1878. In 12 years it had become one of our worst weeds. About 1910 the weed was so much reduced in numbers that it was no longer considered a pest.

Prickly lettuce, or compas plant as it is sometimes called, is easily recognized. It is a tall rigidly erect plant. The leaves have prickly lobes and prickles along the midrib on the under side. The base of the leaf is lobed or eared and clasps the stem. The leaf is twisted just above its base causing it to stand out edgewise from the stem.

The small yellow flowers are borne in heads in a long branching terminal cluster. The seeds are about one-eighth inch long, light brown, and ribbed lengthwise. They are attached by a slender stem to a parachute of white hairs which enables them to drift long distances with the wind.

The weed can be destroyed by cutting before or very soon after the first blossoms appear. The weed is propagated by the seed alone and since each plant may produce several thousands seeds, all plants along roadsides and fence rows as well as in the fields should be destroyed before they have a chance to ripen seed.

*An address by Vern L. Marks, elevator manager, Paxton, Ill., broadcasted June 17, 1926, by Station WLS.

HAY, STRAW AND FEED

IT GENERALLY PAYS TO HOLD CLOVER OR ALFALFA

But Timothy and Mixed Hay Should Be Sold to the Dealer From the Field

By TOM DELOHERY*

In normal years it pays to hold Alfalfa hay or No. 1 Clover hay. It hardly ever pays to hold Timothy hay or Light Clover hay, Mixed.

You will find my reasons for this statement in the graphs that go with this article. I have assembled average hay prices, month by month, for five years, 1921 to 1925, inclusive. In this article I check these prices with figures on the average shrinkage of hay in storage.

The prices quoted are from representative hay terminals. The trend of the hay market is practically the same everywhere, but some markets specialize in Timothy for city teaming concerns; others in green, leafy Alfalfa, to be used by dairymen; and so on.

Some markets pay a premium of \$1 to \$2 a ton for a certain sort of bale, while at other points this same bale would be discounted. To get the most for your hay you have to know which market will generally pay most for just the sort of hay that you have to sell. All I can do in this article is to give you the facts that apply more or less everywhere.

On any market quality is the big factor in setting the price; and by quality the dealer means, more than anything else, *color*. He wants early-cut hay, and the greener it looks, when cured, the more, as a rule, he is willing to pay for it.

Market men say that the best time to cut Timothy or Clover to produce the top grade is not later than full bloom. Mixtures of Timothy and Clover should be cut when the Clover is in full bloom, or not later than when one-half the Clover heads have begun to turn brown. Alfalfa should be cut when one-tenth to one-fourth in bloom. If new growth has started from the crowns, Alfalfa should be cut without regard to bloom. Losses in leafiness occur and the stems become coarse and woody when Alfalfa is allowed to pass beyond the full-bloom stage, thus lowering the grade and sale value.

Just how closely dealers watch hay is evidenced by what one man told me at Chicago. He said so little Timothy makes No. 1 grade because it is cut too late. Brown or overripe leaves and heads reduce the market value several dollars a ton.

Stained, bleached, uncured, hot, wet, musty or moldy hay is unsalable on many markets, and will fetch a paying price hardly anywhere. If is generally better to feed low-grade hay at home.

It pays to hold Alfalfa hay in normal years. A comparison of the accompanying chart showing the average price by months of No. 1 hay at Kansas City for five years, 1921 to 1925. Tests on shrinkage of hay held in storage, made at the Kansas Experiment Station, indicate that you will get \$3.50 a ton more for your hay by holding it for what is normally the high time of the year.

The chart, which covers the crop year, shows January, the first peak month of the season, paying \$5 a ton more than in July. However, you will note that some of this difference must be figured to cover the shrinkage of 6.2 per cent in weight as found by Kansas farmers. This loss in weight of hay in the stack or barn amounts to about \$1.50 a ton.

Reduced to dollars and cents, 100 tons of No. 1 Alfalfa will bring \$177.50 in July. Six months later, in January, the same stack weighs 93.8 tons. At \$22.75 a ton the net is \$213.39. The shrinkage cut the weight to 93.8 tons. These results were

obtained with baled hay stored in an open shed. The Alfalfa was second cutting of medium growth from an old field, one-fourth in bloom, and regarded in proper condition to stack.

Other tests at the same station indicate that the shrinkage of fully air-dried, well-cured Alfalfa, stored in the stack or mow, should not be more than 10 per cent. H. B. McClure, of the Government staff, says the shrinkage in the weight of Alfalfa after it has gone through the "sweat" which usually takes from three to six weeks or longer, is negligible.

In normal years the coarseness of Alfalfa hay varies with the cuttings. This difference is provided for in the requirements of No. 1 hay at the Kansas City market. No. 1 Alfalfa "shall be, if coarse, of bright green color and may contain 1 per cent foreign matter. If of fine stem, being of medium texture, green in color but not necessarily as bright as previously described Alfalfa, it may contain 3 per cent foreign matter. Or it may be fine

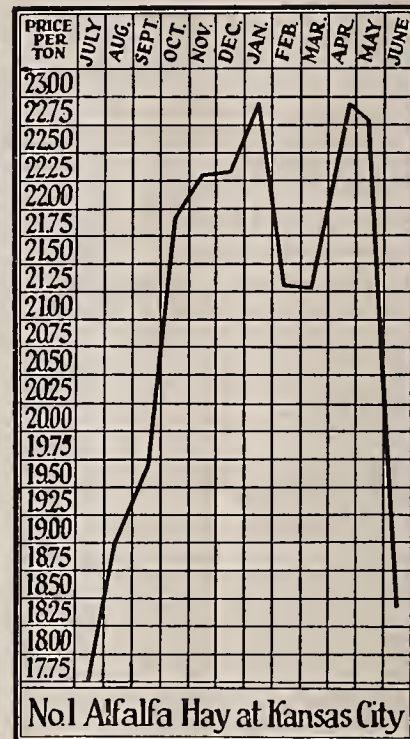
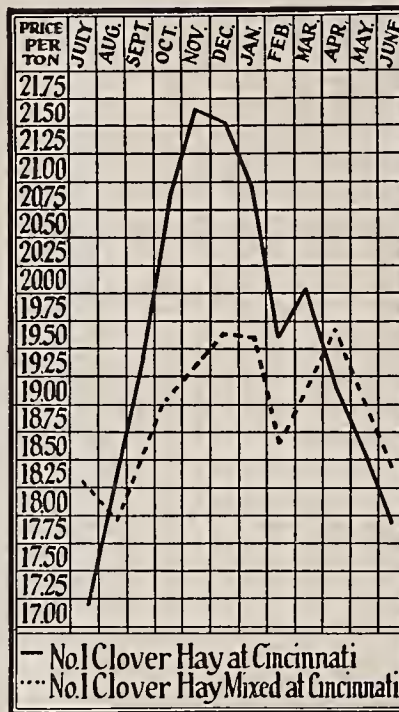
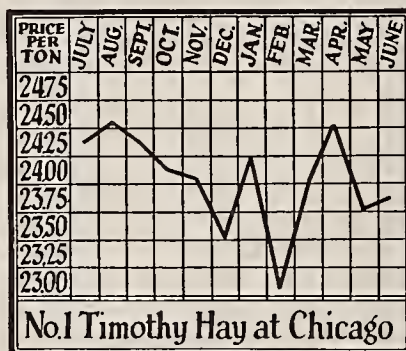
advisable, but over a period of years I think you'll find November the best month to market No. 1 Clover hay.

Held several months after it has been put in the stack or mow it is worth approximately \$2 a ton more, according to the accompanying graph showing the trend of the market at Cincinnati, and the results of shrinkage tests made at several experiment stations.

The chart is made up of the average price by months for five years, 1921 to 1925. It shows how the market swings in average years. Between July, the time of cutting, and November, the peak price month during the crop year, prices advance approximately \$4.50 per ton. In the meantime hay in storage will have shrunk probably as much as 10 per cent, according to Government authorities.

In other words, 100 tons of hay in July will amount to but 90 tons by weight in November. Figured out in dollars and cents, 100 tons in July are worth \$172. In November 90 tons, at \$21.65, are

THESE CHARTS SHOW THE AVERAGE PRICES FOR HAY FOR THE YEARS 1921 TO 1925, INCLUSIVE. THE HIGH POINT FOR TIMOTHY IS AUGUST. BUT BOTH CLOVER AND ALFALFA ADVANCE IN PRICE, SO THAT AFTER DEDUCTING SHRINKAGE THERE IS PROFIT IN HOLDING THEM. MIXED CLOVER HAY SHRINKS MORE THAN IT GAINS



stem, heavy clinging foliage of a dull green color and contain 5 per cent foreign matter, sound, sweet and well baled."

Timothy hay cut early, just as it is coming into full bloom and marketed as soon as it has passed through the "sweat" and is well cured, will, in average years, net you \$3 to \$4 a ton more than if cut when the heads are overripe and the leaves brown, and held several months after harvest.

The importance of selling Timothy after it has cured is shown by the accompanying graph and experiments on the shrinkage in weight of stuff held in the stack or mow. The chart, picturing the trend of the market during the crop year, is made up of average price by months of No. 1 Timothy on the Chicago market for five years, 1921 to 1925. It indicates how the market moves in average years.

Aside from August being the month of peak price in average years, another thing that favors early marketing is the shrinkage in weight. Several state experiment stations have made tests. At Missouri, hay stacked as from the field shrank 12.7 per cent by the following spring. At Michigan, very dry Timothy, put in the mow in June lost 7 per cent in weight by the following January. At Pennsylvania early-cut Timothy lost 25.7 per cent and late-cut hay shrank 18.8 per cent in weight on an average.

All of these tests indicate early marketing is advisable in average seasons.

There will be some years when early selling is

worth \$194.85, a difference of \$22.85, or close to \$3 a ton.

When it comes to Mixed Clover hay the spread in price between the time of cutting, in July and November, the first peak month, is not sufficient to make holding profitable in average years. The accompanying graph shows the average price by months for 1921 to 1925 at the Cincinnati, Ohio, market, and the results of tests made to determine the shrinkage of hay in storage.

The advance in the market from July to November, in average years, is about \$1.30 per ton. In the meantime the loss in weight of Mixed Clover in the stack or mow is 3.6 per cent, so the Michigan Experiment Station found.

WHERE ARE THE FEED MEN?

When the productiveness of other feed sale territories begins to slump, some feed producer, someday, will turn his attention to Louisiana. Home-raised feeds are scarce. The farmers have not been acquainted with the profit possibilities of using more commercial feeds for the cattle, swine and horses on their farms.

Some elevator in New Orleans, for instance, equipped with two or three large grinders, and an advertising manager alive to the possibilities upstate, might render, simultaneously, a service to the rural districts, and a larger profit entry to the company's ledger. A line of nationally advertised feeds, retailed through an elevator in one of the

*Associate Editor of *Farm and Fireside*. Bearing in mind that the writer is addressing his remarks to the farmer who transacts business with the hay dealer, hay dealers themselves can pick up some usable information from the following remarks. Purposely, they have not been "dressed up" to the form of an address to dealers.

states' larger cities, or from elevators at points in other states nearby, might also be an immensely profitable proposition.

The cattle census of the state declined from 804,000 in 1920 to 703,000 in 1925, owing to scarcity of home grain feed, and the ignorance of the value of commercially made balanced rations. A still greater decline, due to the same reason, is shown in the swine census which in 1925, was 528,000, compared to 851,000 in 1920. The horse population declined from 179,000 to 132,000 in the same period.

Corn is the most extensively planted feed crop in Louisiana. The number of acres in corn in 1924 amounted to 80 per cent of cotton acreage. Low yields due to disadvantages in production preclude the chance of corn becoming an important cash crop. As a feed crop, it also falls short of the mark set by the Louisiana feeders' needs.

FEED IN THE COTTON STATE

Over \$15,000,000 was spent by Louisiana farmers for feed last year. This is an estimate based on the 1919 report, showing a rural expenditure for feed of \$12,000,000. The average feed bill indicated by the 1925 Governmental survey was \$170 per farm in the St. Landry Parish (county), \$106 on the farms in the hill section of northwestern Louisiana, and \$716 per farm in the rice area. Much of the feed bought is shipped from distant areas and states. The state is one of the richest territories for commercial feed sales today, as there is a great scarcity of home grown feed.

PELICAN ALFALFA POOR

Alfalfa is grown only in a limited way in the alluvial section of Louisiana, but when properly seeded and cared for makes large yields of excellent hay. It is rather hard to cure the best quality of hay on account of excessive moisture during some parts of the harvest season.

From three to seven cuttings a year may be obtained. The stand does not last as long without re-seeding as in more favored Alfalfa regions. Good seed is rather expensive and except on the best alluvial lands the preparation, seeding, liming and fertilization makes it an expensive and an uncertain crop.

STANDARDS UPHELD

The United States Department of Agriculture has received the following advice from George B. Nourse, District Manager of the Western Weighing and Inspection Bureau, Dallas, Texas:

"I take pleasure in advising you that this question was given consideration at recent meeting of the Southwestern Claim Conference and the following resolution was adopted:

"The official hay standards adopted by the United States Department of Agriculture, September 1, 1925, is a further extension of Federal activities in the grading of farm products and it is the opinion of the committee that this conference should co-operate with the Department of Agriculture so as to assist in the universal establishment of these Federal standards in buying and selling hay which will indirectly benefit the carriers through a reduction in the number of shipments of hay rejected by consignees on account of alleged inferior grade."

FILM TRIBUTE TO HORSE

The horse is trotting out into the limelight. One of the most popular of popular songs now going the rounds nationally, is entitled "Horses". Sensing, perhaps, the new interest in things equine, the United States Department of Agriculture has released a new movie, "The Horse and Man". It is a film of the educational type, containing an acknowledgment of the service the horse has rendered mankind throughout the centuries.

Indian ponies, cow horses, thoroughbreds, plow horses, cavalry mounts, race horses, high steppers, truck horses and bucking bronchos share honors in "The Horse and Man." The film is one reel length. Copies may be borrowed for short periods, or may be purchased at the laboratory cost. A complete list of the Department's films, with information on the method of distributing them, is given

in Miscellaneous Circular 27-M, which may be obtained on application to the Department at Washington, D. C.

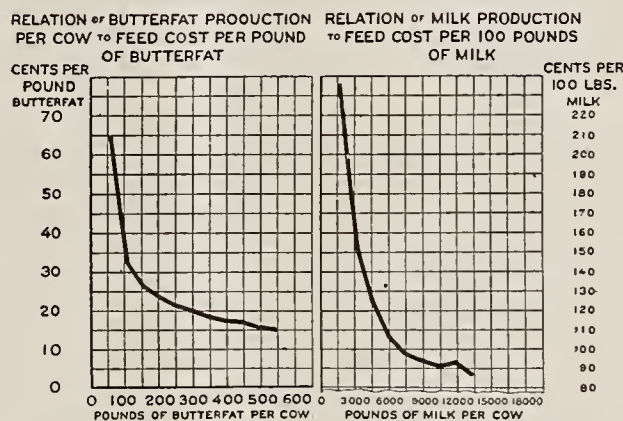
HAY FUEL FOR HEAVY LOADS

A horse pulling contest, relates the *Hay Trade Journal*, was one of features of the Nebraska State Fair, just ended. Officials of the state fair arranged with the University of Nebraska for the use of their Collins Dynamometer during fair week, and staged the first official horse and mule pulling contest on the state fair grounds.

The dynamometer was purchased by the University of Nebraska and will be routed from place to place in the state for pulling contests under the direction of the agricultural extension service. The men connected with these contests are studying the weight and conformation of horses that pull, and particularly of those that win. They hope to stimulate interest in the best types of these good horses and encourage raising more of the real draft type.

MAKING FEEDS PAY

The elevators' dairy feed customers are, or should be, interested in butterfat. Upon that element depends the quality of milk. That there is a rapid decrease in feed cost per pound of butterfat, as the butterfat production per cow increases, is shown by the first part of the chart shown here. The second part of the chart shows that there is a rapid decrease in feed costs per 100 pounds of milk as milk production per cow increases. Low production per cow is the principal reason for high costs of milk production.



Feeding a cow just enough to keep her going is the most expensive way of using feeds that are bought from the elevator. Customers who buy plenty of carefully ground and blended feed, and feed it liberally, get the most satisfactory returns in quantity and quality of milk. They also make the highest possible profit.

AMERICAN FEEDS ABROAD

Almost 4,000,000 pounds of prepared feed (not medicinal) were exported from the United States to 37 different countries during July of this year. The 3,812,752 pounds were valued at \$76,996. Germany, as usual, took more than any other single nation: 2,099,176 pounds. Cuba bought 817,383 pounds; Bermuda, 231,000; British Honduras, 128,005 pounds.

Palestine, Oceania, New Zealand, Philippines, Japan, Peru, Mexico, Sweden, Netherlands, and the United Kingdom were among the other of Uncle Sam's feed customers. The smallest consignment for any one country was 300 pounds sent to the Dutch West Indies.

GASOLINE OR HAY?

Evidence of a continued shift from horses, the hay consumers, to motor trucks, the gasoline eaters, in one of our great cities, is given by the license report of horse drawn vehicles, issued by the city of Chicago, Ill. The total of licensed horse drawn vehicles in the first half of this year was 14,658. For the same period last year it was 17,452, and for the 1925 period, 21,071.

A tractor magazine says of these figures: "These are even more significant when it is recalled that only a few years ago there were over 80,000 horses at work in Chicago when the population was much smaller than it is at present. Not only have motor

trucks and automobiles taken care of the entire increase in transportation but are doing three-fourths of the work formerly done by horses."

The following figures show the decrease in horses received at the Chicago market:

1916	205,000	1921	34,000
1917	107,000	1922	32,000
1918	88,000	1923	26,000
1919	46,000	1924	21,000
1920	43,000	1925	18,000

These figures justify the judgment of horse breeders in refusing to raise colts for a future market which will not exist, declares the tractor magazine.

NEW HAY SPECIFICATIONS

By CAPTAIN GARDINER B. JONES, V. C.

A school is being conducted at the Veterinary Station Hospital, Fort Sam Houston, Texas, during the month of September, 1925, by the Bureau of Agricultural Economics, U. S. Department of Agriculture, for the purpose of training hay inspectors for duty at the various hay exchanges and shipping points of Texas, in the application of the United States Hay Standards. These standards became effective July 1, 1925, after several months study and consideration in the Bureau Laboratories, and in a series of conferences held throughout the country with producers, dealers, and other interested parties. William Hosterman was in charge of the school assisted by K. B. Seeds and E. O. Pollock, all of whom are officials of the Bureau of Agricultural Economics, the two former being stationed in Washington and the latter at the Texas A. & M. College, College Station, Texas.

The school was attended by seven veterinary officers, two enlisted men of the Medical Department (Veterinary Service), one warrant officer, and several civilians.

The course was of three weeks' duration and consisted in the grouping of hays, class and grade requirements, certificate writing, and study of the rules and regulations governing inspection procedure. All hay used for the school work had been carefully selected, graded and percentages of its various components accurately calculated in the Bureau Laboratories at Washington prior to the beginning of the course. The students were required to familiarize themselves with the common hay producing grasses as well as weeds, poisonous plants, and other plants having no feeding value, samples of which were on display in the class room. Both practical and written examinations were held at regular intervals during the course and car lot inspections were made on the tracks at Fort Sam Houston and San Antonio, Texas.

The benefits of the school have already been demonstrated in connection with forage inspection at this station by the attitude of the contractors. The reliable dealers show a better spirit of co-operation by submitting hay which conforms to specification requirements and the others abide by the inspector's decision more gracefully than heretofore. All contracts made after November 19, 1925, the date on which the United States Official Hay Standards were adopted by the specifications Board, must be based on these standards which will greatly simplify hay inspection in the Army.

A brief comparison of a few points in the two specifications will show wherein the United States Standards are superior to the Old Quartermaster corps Specifications No. 24-6 B:

In the United States Standards there are five major groups of hay based on the combination of grasses which occur in the same geographical region and are thus frequently found in mixtures: Group I—Timothy, Clover, and Grass hay; Group II—Alfalfa and Alfalfa Mixed hay; Group III—Prairie hay; Group IV—Johnson and Johnson Mixed hay; Group V—Mixed hay.

These groups are further divided into classes, depending on the kind of hay or mixture of various kinds, without reference to quality or condition. Each class, with the exception of midland in the prairie group, is subdivided into three numerical grades and a fourth or sample grade for hay of particularly low quality.

A striking difference in the two standards occurs in the Alfalfa group. In the old standards we have Choice; No. 1; Standard; No. 2; No. 3; and No Grade;—six grades in which it is very difficult to separate one from the other; and it is largely a matter of

guess work to determine in just which grade a lot of hay should be placed, choice being the highest quality, No. 1 the next highest, standard the third, etc. This is very confusing as one would naturally assume that No. 2 was the second grade from the top instead of the fourth. In the United States Standards we have four important factors which determine class and grade, the percentage of specific grasses governing the class (Alfalfa, Alfalfa Light Johnson Mixed) while leafiness, per cent green color, and foreign material influence the grade (No. 1, 2, or 3).

The percentage of leafiness and foreign material is calculated by weight. The term "per cent green" refers to the amount of green color or green appearance and is definite, being based on the "100 per cent green color of field cured hay produced so as to have received no discoloration from maturity, sun bleach, dew, rain or other damage." In the old specifications only comparative terms were used to express the amount of color such as good, fair, bright green, etc. An inspector can become quite accurate in estimating color by sending samples to the Bureau Laboratory in Washington, and should do so from time to time as a check on his color determination.

To compensate for the grade of Choice, in Q. M. C. Specifications 24-6 B, we have three special grades in the United States Standards to supplement the numerical grades for hay of particularly high quality cut at the proper time and properly cured. "High Green Color" is added to the grade designation when the color is 15 per cent or more higher than the minimum requirement. When Alfalfa is especially soft it is indicated in the grade designation by the word "soft". In the same manner the texture of the hay may be indicated by the words "fine" or "coarse" as the case may be. Fine Alfalfa contains no stalks having diameters greater than that of No. 12 steel wire (approximately 10/100 of an inch) and not exceed 30 per cent of stalks having diameters greater than that of No. 14 steel wire (8/100 of an inch). Coarse Alfalfa is that which contains 30 per cent or more of round, hard stalks with diameters greater than that of No. 12 steel wire.

Prairie hay is divided by the old specifications into 10 grades; No. 1, No. 2, and No. 3 Prairie; No. 1 and No. 2 Midland; No. 1 Packing, and Packing; Sample Prairie; No grade Prairie; and Bedding. In the United States Standards, the Prairie hay group is divided into four classes: Upland, Wheat Grass, Midland, and Upland-Midland Mixed. Each is subdivided into three numerical grades except Midland which has only two. In addition to the numerical grades there is a sample grade for each class which includes all hay not meeting the requirements of the numerical grades or which has certain detrimental characteristics enumerated in the standards. Sample grade includes all of the last five grades in the old Q. M. C. 24-6 B. standards. The class "Wheat Grass" was originated to take care of that class of wild hay peculiar to certain parts of the Northwest where it is produced almost in a pure state and for which there has been developed quite a market.

The numerical grades for all classes of Prairie hay are controlled by two factors, color and foreign material, the requirements being 60 per cent or more green color for the No. 1 grade, 30 per cent or more for No. 2 and less than 30 per cent for No. 3, with a maximum allowance of foreign material of 10, 15, and 20 per cent respectively. In specifications 24-6 B, we have nothing but comparative terms as a basis for our grading, such as "good color", "fair color", "badly off in color", "weedy", "well cured", "sweet", "sound", and "not enough for other grades", which often leaves one in doubt and frequently gives rise to controversy. The only definite percentages provided were the allowance of Midland in No. 1 and No. 2 Prairie hay, and the allowance of weeds in No. 1 and No. 2 Prairie, and in No. 1 and No. 2 Midland. Foreign material is not a factor in grading under 24-6 B except when there is 25 per cent or more which throws it into Sample grade. The special grades of "High Green Color" and "Coarse" are used for Prairie hay under the new standards in the same manner as in the Alfalfa group but there is no special grade of "Fine".

In the United States Standards for Johnson and Johnson Mixed hay we have six classes depending upon the percentages of other hays or grasses in the mixture, each class being divided into the three usual numerical grades. Only one class "Johnson" will be considered here as I believe there is very little or no "Johnson Mixed Hay" purchased by the Army. In the class "Johnson", there are three numerical grades in both Q.M.C. 24-6 B, and the United States Standards, with a Sample grade and "Coarse" in the latter. Sample Grade is Johnson Grass not meeting the requirements of the numerical grades as in the two preceding groups. Coarse Johnson is a distinct grade with no numerical designation and includes all Johnson hay with 30 per cent or more stalks having diameters greater than that of No. 10 steel wire (approximately 13/100 of an inch) or more than 30 per cent of stalks bearing mature seed heads, or more than 30 per cent of any combination of the two.

This is a decided improvement over the old specifications as Johnson grass grows very rank and coarse and when not cut at the proper time becomes woody and low in nutritive value. Heretofore there has

been absolutely nothing to keep this class of hay out of the No. 2 and No. 3 grades and only the arbitrary term "medium texture" to keep it out of the No. 1 grade. Consequently, an inspector was always in difficulty when he called any Johnson hay coarse as it never grows larger than medium texture in a contractor's estimation. This new grade "Coarse" penalized the farmer who does not cut his hay at the proper time and helps the consumer who is paying for good hay by keeping it out of his stables. It is also a big help to the inspector as by counting a few stems and using a wire gauge, he never has to guess about texture.

In Q.M.C. Specifications 24-6 B, No. 1 Johnson shall be Johnson with not more than 15 per cent mixture with Clover or other native grasses, good color, sound and well baled, and to show medium texture. No. 2 Johnson hay shall be Johnson with no more than 25 per cent mixture or other native grasses, sound fair, color, and well baled. No. 3 Johnson hay shall be Johnson not good enough for the other grades, may be coarse, brown, or may contain 10 per cent of air or sunbleached hay on outside of bale, all to be sound and well baled.

In the United States Standards, Johnson hay may include not to exceed 10 per cent (of the total hay) of early cut cane hay and 10 per cent (of the total hay) of other grasses, and may contain not over 10 per cent of legumes. The numerical grades are based on color and foreign material, No. 1 having 45 per cent or more green color and not to exceed 10 per cent of foreign material, No. 2 must have 25 per cent or more green color and not to exceed 15 per cent foreign material, and No. 3 less than 25 per cent green color and not to exceed 20 per cent foreign material. We have two supplementary grades in this group, "High Green Color" and "Fine" which are applied as in the Alfalfa group. Fine Johnson contains no stalks bearing mature seed heads and no stalks having diameters greater than that of No. 11 steel wire (12/100 of an inch) but may contain 30 per cent of stalks having diameters greater than that of No. 13 steel wire (9/100 of an inch).

Mixed hay is not included in Q. M. C. 24-6 B as a separate group, but in the United States Standards it includes hay not classified under the first four groups, which contain, either singly or in combination, 50 per cent or more of Timothy, Clover, Alfalfa, upland and midland grasses, or other grasses as refined therein.

There are doubtless many points in the old and new hay standards that have been omitted but a few of the outstanding differences which are of importance have been considered with special reference to their application in practical field inspection at this station.

"NON-CONTIGUOUS" STATES AS U. S. CUSTOMERS

An export outlet for United States hays and feeds, which is often overlooked, is the trio of our territories, none of which adjoins this country, but which are, nevertheless, closely related to us in trade. In the seventh month of this year, Alaska, Hawaii, and Porto Rico, bought bran, middlings and feed valued at nearly \$230,000. Feed by the thousands of tons was shipped, while the total hay volume was about 500 tons. Most of that went to Hawaii.

LEAGUE OF HAY NATIONS

Nine countries bought United States hay during July, the last month for which export figures are available on this product. The Philippine Islands led with a reception of 1,120 tons. Canada was second with 376 tons. In the order of their importance, the other seven countries importing our hays were Mexico, Panama, Japan, Nicaragua, Cuba, Dutch West Indies and Costa Rica. The total of 1,658 tons consigned was valued at \$35,146. This is exclusive of hay and feed shipped to Alaska, Hawaii, and Porto Rico.

POPULAR THEORY DISPROVED

The rather popular belief that hay cures more rapidly when the leaves are retained on the stems, due to the theory that the leaves act as pumps to draw the moisture from the stems, is not well founded, says the United States Department of Agriculture. Extensive tests with Alfalfa hay to determine whether or not any appreciable amount of

water passes off through the leaves after the hay is harvested showed that stems from which the leaves had been picked lost their moisture even more readily than when allowed to cure in the natural state; that is, with the leaves attached.

The assumption that the leaves are important factors in the curing process is in part responsible for the oft-repeated advice to cure Alfalfa hay in the windrow or cock so that the leaves will be retained in a living condition and continue to draw the water from the stems. Curing hay in the windrow or cock is still good practice, however, because of the saving of the leaves for their additional food value, and because hay cured in this manner has a better color.

NEW YORK FEED PRICES LOWER

By C. K. TRAFTON

Prices for feed in the New York market have been on the down-grade most of the time during the past month, although at the lower levels the tone is now said to be steady to firm, the latter applying mainly to corn goods which held relatively steady while wheat and oil feeds were declining from 50 cents to \$1.25 per ton. In short, hominy feeds are only about 35 cents per ton lower than they were a month ago while Spring wheat bran is \$1 lower, middlings 50 cents lower, Red Dog 75 cents lower, cotton-seed oil meal \$1.25 lower, and linseed oil meal \$1 lower, and imported beet pulp about \$1 lower. The general downward movement was largely seasonable. It was evident that harvesting and threshing progressed in at least a fairly satisfactory manner as there was an appreciable increase in the interior movement, and hence the general belief was that the crop would exceed previous expectations, especially in Canada. Hence it was not astonishing that the weakness in feeds first became especially marked in the Northwest. In fact, prices fell so rapidly that millers there were able to undersell local or nearby producers in this territory. Latterly, however, as the weather is still largely unsatisfactory for Spring wheat, millers there have advanced their feed prices and at this writing it is said that they cannot compete here on bran and middlings. In spite of the lower levels ruling, buying has continued on an extremely small scale and it is evident that buyers have little faith in the market, possibly because of losses sustained previously on purchases at what seemed to be a reasonably safe basis. Then, too, demand was checked by the general improvement in pastures because of the prolonged and wide-spread rains. An interesting item was the arrival of 11,280 bags of bran and 11,280 bags of middlings from Argentina. They were said to have been available at about the same price as quoted by the leading local producer at that time for similar goods.

DEATH OF WILLIAM B. MOORE

As a hay broker for various New York City commission houses, William B. Moore has been known for a great many years as an active personality in the hay trade of America's largest city. He passed away suddenly at his home in Floral Park, L. I., on Sunday, August 22. He was 65 years of age. His wife survives him. He leaves a remarkably wide circle of friends and associates who keenly regret his loss. For many years the late Mr. Moore handled most of the hay sold at the West 130th Street yard, New York City.

RECOMMENDS GRAIN AS PASTURE SUPPLEMENT

Taking up the old question of whether or not dairy cattle should be given feed in generous amounts during the pasture season, G. C. Humphrey, dairy husbandryman at the Wisconsin Experiment Station, contributes some concrete suggestions. Elevator men handling a sideline of feed for farm and town trade will find a digest of his suggestions stimulating.

Mr. Humphrey suggests varying amounts of grain be fed in addition to abundant pasture where a larger amount than nine-tenths of a pound of butterfat per cow per day, is wanted or expected. For Holstein or Ayrshire cows producing 30 pounds of

milk daily, he recommends five pounds of grain feed per day; for 40 pounds of milk, nine pounds; for 50 pounds of milk, 10 pounds. For Guernsey or Jersey cows, he suggests a 10-pound grain feed ration when a 40-pound production of milk is expected.

STATE FEEDS INADEQUATE

Although the cost of keeping a cow a year in Louisiana has been proven to be the lowest of many states studied, it is also proven that the cost of producing 100 pounds of milk in the Pelican State is the highest of any of the states studied. This is due to the very low production per cow. This, in turn, is due to a reticence of the farmers in regard to the use of mixed feeds. Even the home grown grains, mostly of poor quality, are not ground for the most part. In many communities, there is no elevator or other agency where good grinding service, or ready-mixed feeds can be had.

NEW MEXICO-ALABAMA HAY GRADE CORRESPONDENCE

Below is printed a letter from the Artesia Alfalfa Growers Association addressed to a Birmingham, Ala., brokerage concern. It is of more or less general interest, and is self explanatory. Headquarters of the Artesia Alfalfa Growers Association is Artesia, N. M. The letter:

We note by your letter of August 9, that your market has gone back to the National Hay Association grades. We are rather sorry to hear this as we believe you have not given the Federal system of grading hay a fair trial, and in view of the fact that many other markets have Federal grading systems no shipper of reputation will care to ship Birmingham on the old National Hay Association grades of Choice, consequently the purchaser will get no better hay than Fine, Soft No. 1, Federal Grade, and your action will only cause additional confusion.

It is true that the hay shippers throughout the country have not become accustomed to the new grades, consequently did not recognize the difference between Fine No. 1 and Coarse No. 1 and purchasers often received a grade of hay which they did not intend to purchase and were obliged to accept the same because they did not designate which No. 1 hay they wanted. An order for United States No. 1 hay, Green color, Fine fibre, would certainly bring to your market as good hay as the old National Hay Association Choice, and yet the Federal grade is possible to attain, whereas the National Hay Association Choice is an impossible grade. Shippers who have studied this question carefully will rarely accept an order for Choice hay because they realize that strictly and literally there is no such hay made, whereas any reputable shipper in the Southwest will accept orders for United States No. 1 High Green Fine fibre, leafy Alfalfa, this being possible of attainment and represents the highest grade hay possible to be made and against which an official certificate can be issued anywhere.

We are establishing Federal Grading System here and expect to have all of our hay graded by a Federal inspector next season. It is our firm conviction that the Birmingham Exchanges have not considered this question thoroughly nor given it sufficient time to develop itself properly between seller and purchaser. We are sending copies of this letter to the Bureau of Agricultural Economics, Washington, D. C. Also to Mr. E. O. Pollock, division superintendent, College Station, Texas, and we sincerely trust it will still be possible to get all of the markets lined up for Federal grading of hay as it causes endless confusion and difficulty to have so many different standards.

NEW YORK HAY PRICES IRREGULAR

By C. K. TRAFTON

Prices for hay in the New York market have followed a rather irregular course during the past month, but at this writing they show no important change from those ruling a month ago. For a week or two the tendency was upward, especially on old hay as buyers seemingly felt that little or no more old hay would come in. These fears, however, soon proved to be founded as the arrivals of old hay exceeded expectations. As a consequence buyers felt more comfortable regarding supplies and the majority of them withdrew from the market. Prices failed to hold their early gains. The tone of the market is fairly steady. It is true that demand has become very light; but receipts are by no means burdensome, being just about sufficient to meet normal requirements. Another factor for stability has been the generally satisfactory quality of the bulk of the arrivals. During the past few weeks there has been very little poor quality hay arriving and as the routine daily demand has served to clean up a large percentage of

the previous liberal supply this factor for depression has been eliminated to a large extent. Another feature regarding the arrivals was the almost entire absence of small bales of the better grades. No. 1 has been commanding practically as much in the small bales as in the large. Opinions regarding a uniformly high quality for the bulk of the new crop, as mentioned in our previous letter, have been modified somewhat. In short, some well-informed dealers now express the opinion that the proportion of No. 3 hay will be larger than they had assumed formerly. This opinion is based on the excessive rainfall for several weeks over wide growing areas as a result of which it was impossible to cut the hay promptly. Therefore reports from some sections alleged that much of the crop became over-ripe and also that a great deal of rain damage was sustained.

NEW FEED BRANDS

"OBERCO" mineral feeds for poultry, hogs and cattle. East Coast Trading Company, Baltimore, Md. Filed July 1, 1926. Serial No. 233,982. Published August 10, 1926.

"HITS THE MARK" stock feed. A. E. Staley Manufacturing Company, Decatur, Ill. Filed June 27, 1926. Ser. No. 233,794. Published August 10, 1926.

"M. T. & E. CO." poultry and stock foods. Tioga



Mill & Elevator Company, Barton, N. Y. Filed May 29, 1926. Serial No. 232,525. Published August 10, 1926.

"PLANTERS SPECIAL" feed for horses. Universal Mills, Fort Worth, Texas. Filed May 17, 1926. Ser. No. 231,772. Published August 10, 1926.

"SUREMILK" stock food. Sperry Flour Company, San Francisco, Calif. Filed June 18, 1926. Serial No. 233,464. Published August 17, 1926.

"REDSKIN" poultry feeds. Nebraska Consolidated Mills Company, Omaha, Neb. Filed May 27, 1925. Serial No. 232,341. Published August 17, 1926.

Trademarks Registered

217,029. Hog feed. John Percy Grimes, doing business as Grimes Milling Company, Salisbury, N. C. Filed February 17, 1926. Serial No. 227,404. Published May 4, 1926. Registered August 24, 1926.

217,032. Poultry feed. The Quaker Oats Company, Chicago, Ill. Filed February 20, 1926. Serial No. 227,602. Published June 1, 1926. Registered August 24, 1926.

217,307. Feed for hogs and chickens. Perry Milk Products Company, Perry, Iowa. Filed April 6, 1925. Serial No. 212,293. Published June 15, 1926. Registered August 31, 1926.

217,415. Wheat flour, Graham flour, egg mash, pig mash, dairy feed, cornmeal, scratch feed, cut corn and buttermilk scratch fattener. Nicholson Mills, Henderson, Ky. Filed January 30, 1926. Serial No. 226,675. Published June 15, 1926. Registered August 31, 1926.

Trademarks Renewed

56,152. Medicated stock food. Registered August 28, 1906. Marion W. Savage. Renewed August 28, 1926, to International Stock Food Company, Minneapolis, Minn., a corporation of Maine, successor. Registered August 31, 1926.

56,179. Medicated poultry food. Registered August 28, 1906. Marion W. Savage. Renewed August 28, 1926, to International Stock Food Company, Minneapolis, Minn., a corporation of Minnesota, successor. Registered August 31, 1926.

BEAR HAY FOR SHEEP

Under the direction of B. Youngblood, in charge of the college experiment station in Brazas County, Texas, many experiments with hay were conducted

several years ago. The feeding trials disclosed the value of many roughages not widely known, or generally experimented with, so in spite of the fact that several years have elapsed since the results were first announced, hay users still follow the suggestions set forth in the Texas bulletin. It is still the latest "dope" on some hays.

Bear grass, or *Yucca Glauca*, was used in one digestion experiment with sheep. The leaves of this grass are very tough and carry small spines along the edge. Although the animals were fed on a ration not sufficient to maintain them, they ate only about 40 per cent of the bear grass.

5,000,000,000 BUSHEL

Two Government reports that go far towards determining the size of the wheat crop in the United States and Canada were given to the trade late yesterday. In the United States the wheat crop is given as 838,000,000 bushels, an increase of 169,000,000 bushels over last year's harvest. Canada has 395,000,000 bushels, a decrease of 18,000,000 bushels from the 1925 returns. The two countries combined have 1,233,000,000 bushels compared with 1,082,000,000 bushels last year, an increase of 151,000,000 bushels.

An aggregate of the five grain crops of 5,037,000,000 bushels was given by the United States Department of Agriculture for wheat, corn, oats, rye, and barley, or 77,000,000 bushels more than last month, but a decrease of 192,000,000 bushels from last year's harvest and of 302,000,000 bushels as compared with the five-year average.

WELLAND CANAL GRAIN SHIPMENTS BREAK RECORD

All records for grain shipments through the Welland Canal were exceeded during the month of June, 1926, when a total of 26,740,700 bushels was shipped. This figure is 5,000,000 bushels over the previous high mark, which was made in the month of August, 1925. The record movement during June brings the total grain traffic through the canal this season up to 45,987,176 bushels, a figure which is over 6,000,000 bushels greater than that to July 1 last year, despite the fact that navigation did not get under way until three weeks later this year. The total to the end of June last year was 39,470,955 bushels.

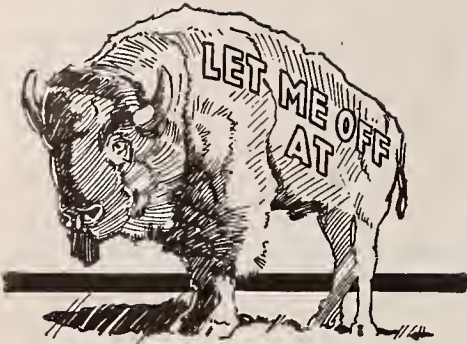
Wheat formed the bulk of the cargoes carried through the canal, a total of over 16,000,000 bushels of wheat having been carried through, or practically double the amount during the corresponding months last year. Oats, barley and rye showed increases also, but flax and corn showed a decrease.

WHO HANDLES MINNESOTA GRAIN?

According to the report of the Minnesota Railroad & Warehouse Commission for 1924-5 the number of the farmers' elevators in proportion to the total number of country elevators in the state increased steadily from 1914 to 1921, but since then has been decreasing. In 1914-15 there were 296 farmers' elevators in Minnesota, 625 line houses, 302 independent and 205 mill elevators. The high point of the farmer movement, 1921-22, shows 447 farmers, 523 line, 388 independent, and 152 mill. In 1924 there were 413 farmers, 466 line, 370 independent and 193 mill elevators.

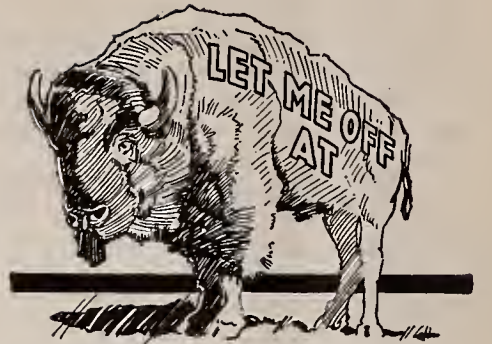
In their most prosperous year the farmers elevators marketed 52 per cent of the grain of the state while the last report shows only 48 per cent to their credit. Throughout the term under consideration, however, there has been considerable fluctuation from year to year, so this decrease is not of particular significance.

During the crop year 1915-16 the line houses handled their largest proportion of grain in the 10 years under consideration, 31 per cent. That year the independent houses handled 23 per cent of the state's grain, the high mark for that class; while peak for mill elevators was in 1916-17, 17 per cent.



Buffalo to be Host for Grain Dealers' Annual Meeting

Preparations for Unusual Entertainment and Special Business Features Assure an Interesting Convention



NEARLY a full decade has passed since the Grain Dealers National Association met in Buffalo, but those who were there in 1917 will remember the occasion as having been among the best of the annual meetings. The thirtieth annual convention, which occurs October 18, 19 and 20, will take the grain dealers back to Buffalo, and Secretary Charles Quinn is of the opinion that with the arrangements so far consummated, both as to business and entertainment, the present convention will rival the previous Buffalo meeting in general interest and potential benefits.

Reduced rail rates have been secured. It will not be necessary to bother about "validations". You simply buy a return ticket when you start and when you are leaving the convention city for home, you simply have the ticket stamped at the station ticket office before boarding the train. The special rate is one and one-half fares for the round trip. All of these arrangements are being perfected, as usual, through the secretary's office.

There are to be but three sessions of the convention during the three days. These sessions will be held in the mornings, and the afternoons will be given over to entertainment, the Buffalo hosts having arranged for several enjoyable trips for both the ladies and the men. During the afternoon of the first day the men will be taken for a ride around Buffalo harbor in a steamer and the ladies will be taken in automobiles to East Aurora, the home of the Roycrofters, where they will be received by Elbert Hubbard II. In the evening both the ladies and men will attend an informal dance in the ball room of the Hotel Statler, convention headquarters.

The morning of the second day the ladies will be taken in automobiles for a ride around the city, having luncheon at the Buffalo Consistory. In the afternoon they will join the men for a trip to Niagara Falls in a special train. The banquet of the evening will be attended by both ladies and gentlemen, and a speaker of national reputation will be secured. Buffalo is planning to give the convention an elaborate entertainment, and the program will be close to being a repetition of the famous entertainment provided in 1917 when the Grain Dealers National Association last met in Buffalo.

Among the prominent speakers during the business sessions of the convention will be John W. Coverdale, former secretary of the American Farm Bureau Federation, who is now in the grain business in Cedar Rapids, Iowa. He will discuss the farm problem from the standpoint of the man who has been on the inside of the farm movement and who realized long ago that the producers of farm products need not look to the politicians in Washington for relief. Another important speaker will be W. Sanford Evans, of Winnipeg, Canada. He will talk on co-operation in the Dominion with special reference to the great wheat pool in the Canadian Northwest.

Hon. Carl E. Milliken, former governor of the State of Maine, will make an address entitled "What American Business is Doing to Promote Commercial Arbitration." He is at present connected with the American Arbitration Association and is engaged in the task of securing a uniform arbitration law in all the states. A. Hansen, chairman of the Futures Trading Committee of the New York Produce Exchange, has as the subject of his speech "Buffalo's Market Advantages in Connection With the Resumption of Future Trading in New York." Future trading in New York was discontinued in 1909 and Mr. Hansen had a prominent part in arranging for its resumption in 1926. Under the new arrangement Buffalo is to be the delivery point for all New York's future trades.

The program for both the

convention sessions and the entertainment is as follows, according to advices from Secretary Charles Quinn:

MONDAY, OCTOBER 18

Morning Session, 9:30

Call to order by the president.
Invocation—Rev. Chas. D. Broughton, Buffalo.
Address of welcome on behalf of the City of Buffalo—Mayor Frank X. Schwab.
Address of welcome on behalf of the Buffalo Corn Exchange—President W. J. Heinold.
Response on behalf of the Grain Trade—C. D. Sturtevant, Omaha, Neb., first vice-president of the Grain Dealers National Association.
President's Annual Address—F. G. Horner, Evanston, Ill.
Report of Secretary-Treasurer—Charles Quinn, Toledo, Ohio.
Presentation of Booster Prizes.
Transportation—Henry L. Goemann, chairman, Mansfield, Ohio.

TUESDAY, OCTOBER 19

Morning Session, 9:30

Address—"Congress and the Farmer"—John W. Coverdale, former secretary of the American Farm Bureau Federation, Cedar Rapids, Iowa.
Address—"Co-operation and Wheat Pooling in Canada"—W. Sanford Evans, Winnipeg, Man.
Legislation—A. E. Reynolds, chairman, Crawfordsville, Ind.
Trade Rules—C. D. Sturtevant, chairman, Omaha, Neb.
Crop Reports—Ben U. Feuquay, chairman, Enid, Okla.
Membership—Wade Wood, chairman, Birmingham, Ala.
Rejected Applications—J. W. Greer, chairman, Minneapolis, Minn.
Arbitration Appeals Committee—W. W. Manning, chairman, Fort Worth, Texas.
Arbitration Committee No. 1—J. R. Murrell, Jr., chairman, Cedar Rapids, Iowa.
Arbitration Committee No. 2—E. H. Bingham, chairman, Cedar Rapids, Iowa.
Arbitration Committee No. 3—F. J. Schonhart, chairman, Buffalo, N. Y.
Arbitration Committee No. 4—E. W. Crouch, chairman, McGregor, Texas.
Arbitration Committee No. 5—Harry J. Smith, chairman, Kansas City, Mo.
Arbitration Committee No. 6—S. C. Armstrong, chairman, Seattle, Wash.

Feed Arbitration Committee—J. H. Caldwell, chairman, St. Joseph, Mo.

WEDNESDAY, OCTOBER 20

Morning Session, 9:30

Address—"What American Business Is Doing To Promote Commercial Arbitration"—Hon. Carl E. Milliken, former Governor of Maine.

Address—"Buffalo Market Advantages in Connection with the Resumption of Future Trading in New York"—A. Hansen, chairman of the Futures Trading Committee of the New York Produce Exchange.

Uniform Grades—G. E. Blewett, chairman Fort Worth, Texas.

Grain Products Committee—E. C. Dreyer, chairman, St. Louis, Mo. (In presenting his report to the convention Mr. Dreyer will give the results of the group meeting of feed interests, held on Monday and Tuesday, October 18 and 19. At this group meeting changes in the rules governing the handling of feedstuffs are to be proposed. If the group meeting makes any changes in the existing feed rules Mr. Dreyer will present these changes to the general convention for adoption.)

Unfinished Business.

Election and Installation of Officers.

New Business.

Adjournment.

ENTERTAINMENT For the Ladies

Registration Headquarters at the Hotel Statler. Local hostesses will greet the arriving ladies.

Monday, October 18—Leave Hotel Statler at 10 a. m. for an auto trip to visit the famous Roycroft Inn at East Aurora. Reception by Elbert Hubbard, II. Inspection of the inn. Luncheon. Musical and literary entertainment. Inspection of the Roycroft work shops. Leave East Aurora at 4:30 p. m. Arrive at the Hotel Statler at 5:30 p. m.

Tuesday, October 19—Leave Hotel Statler at 10 a. m. in comfortable riding automobiles for a trip around Buffalo. Arrive at the Buffalo Consistory at 11:45 a. m. Organ recital and display of wonderful lighting effects in the Consistory Auditorium. Luncheon at 12:15 p. m. Leave the Consistory at 1:15 p. m. by the same cars, going direct to the Terrace Station where they will meet the men for the trip to Niagara Falls.

For the Men

Monday, October 18—Leave the Crystal dock at the foot of Commercial street at 2:30 p. m. on the steamer *Americanna* for a harbor inspection trip. The delegates will have an opportunity to see Buffalo's modern grain elevators in operation. During the trip around the outer harbor special entertainment features will be given. There will be good music and a luncheon. Return to the landing at 5:30 p. m.

For Both Ladies and Men

Monday, October 18—Informal dance at the Hotel Statler ball room. All visiting delegates invited. The Buffalo reception committee will act as hosts and hostesses. During the intermissions there will be special entertainment features. An evening of splendid entertainment is guaranteed.

Tuesday, October 19—Leave Buffalo at 1:30 p. m. on a special New York Central train for Niagara Falls and the Great Gorge trip. This trip takes in a visit to the Queen's Park and the Horseshoe Falls on the Canadian side. The delegates will then be taken down the Canadian side, stopping at Brock's Monument where a panoramic picture will be taken. The party will cross at Queens-town to Lewiston on the American side and proceed up the American gorge to Niagara Falls. The special New York Central train leaves Niagara Falls at 5 p. m., arriving at the Terrace Station, Buffalo, at 6 p. m.

Tuesday, October 19.—At 7:30 p. m. a great banquet will be held in the Hotel Statler ball room. There will be good music and special entertainers.



A VIEW OF BUFFALO'S RIVER FRONT

ASSOCIATIONS

CONVENTION CALENDAR

September 17.—Mutual Millers and Feed Dealers Association of Western New York and Northwestern Pennsylvania, Samuels Hotel, Jamestown, N. Y.

October 18-20.—Thirtieth annual convention of the Grain Dealers National Association, at the Hotel Statler, Buffalo, N. Y.

October 18.—United States Feed Distributors Association, Hotel Statler, Buffalo, N. Y.

October 21-22.—Association of Feed Control Officials of the United States, Willard Hotel, Washington, D. C., in conjunction with the Association of Official Agricultural Chemists and of Dairy, Drug and Food Officials.

VERMONT DEALERS HOLD MEETING

At the meeting of the Vermont Grain Dealers Association, held August 17 and 18, Secretary of Agriculture W. M. Jardine was the distinguished guest. The sessions were held at the Hotel Vermont, in Burlington, and were attended by nearly 70 dealers. President A. W. Braisted, of Bennington, called the meeting to order and called upon Dean J. L. Hills of the University of Vermont to introduce Mr. Jardine. The Secretary of Agriculture contributed a few extemporaneous remarks and concluded by saying that he was present in the role of listener rather than a speaker.

Dr. Ladd was one of the principal speakers. He presented a chart which gave the summary and comparison of business done in 14 co-operative and 53 privately operated establishments in New York State in 1924. Among the other important addresses was one by J. E. Carrigan, assistant state leader of county agents. E. H. Loveland, dairy specialist, told of the program of the experiment service in regard to dairy work. D. E. Van Alstine, specialist in agronomy, discussed "Seeds, Fertilizers and Farm Crops," and advocated the use of more legumes. H. P. Young, farm management demonstrator, talked on "Agricultural Economic Studies and Feeding Practices on the Vermont Farms."

A. W. Braisted, Bennington, was re-elected president; and the other officers named were: E. T. Seabury, Waterbury, vice-president; C. F. Dowe, St. Albans, secretary; and C. H. Stearns, Johnson, treasurer.

MICHIGAN GRAIN MEN MEET

On August 18 and 19, the twenty-fifth annual meeting of the Michigan Hay and Grain Association was held at the New Olds Hotel in Lansing, Mich. In preparing the two-day program an effort was made to select subjects which would prove instructive and interesting, and men were selected for the various addresses on the program according to their qualifications. A representative attendance was on hand when the meeting was called to order, and special interest was shown in the leading topic—an address by ex-Governor W. L. Harding of Iowa, who is now chairman of the St. Lawrence Waterway Commission.

In giving his annual report, T. J. Hubbard, secretary-treasurer, reviewed the activities of the organization during the last year and pointed out the benefits which members are deriving from the Association. His report, in part, follows:

SECRETARY HUBBARD'S REPORT

During the past 12 months, I have published and mailed to our members, both active and associate, a total of eight bulletins. Instead of issuing these bulletins about a certain time each month, I have published them as often as there were matters of sufficient importance, to bring to the attention of our members.

In the preparation of these bulletins I have endeavored to make them interesting to shippers and receivers, also millers of grain, also shippers and receivers of hay, so that all members would feel we were endeavoring at all times to protect their interests. I also continued the plan inaugurated in 1924 of publishing in each bulletin, suggestions in regard to care of property, buildings and machinery, prevention of fire losses, handling of charge accounts, annual audit of books, monthly check of insurance policies with inventory so as to be sure that your buildings and contents are fully covered by insurance at all times.

I have endeavored to supply through the medium of our bulletins, also in answer to phone calls from members, authentic market information on hay, grain and grass seeds, and at this time I desire to express my appreciation of the hearty co-operation I have received from Mr. Marshall of Chatterton & Son and Mr. Osmer of the Michigan Elevator Exchange who furnished me with market information on grain for my bulletins.

Traffic Matters

In this branch of our service to members, we have accomplished much the past year, and there are still greater results yet to be secured. The new hay rates to all southern states south of the Ohio River as

covered by Eastman Docket 13494 or the Southern Rate Case, we hope to see put in effect not later than January 1 next. This matter as well as others which our Transportation Committee are now working on, and which will result in a large financial saving to our members, will be covered in the report of Chairman Paul George.

Legislative Matters

As Chairman W. I. Biles of our Legislative Committee will not be able to be with us today, I will include his report with mine. During the session of our state legislature the past winter, nothing transpired which in any way affected the interests of our members. However, as you are well aware a strong effort was made during the last session of Congress, to put through several forms of farm relief bills, all of which were found impractical and full of jokers. Among the bills offered for the House and Senate to consider, was a revised edition of the old McNary-Haugen Bill, which was more vicious than any of the others. The latter part of April and the first week of May a strong effort was made to rally sufficient support in both houses of Congress to secure a majority vote for the bill. Our Association, as in past years, had been co-operating with the Grain Dealers National Association in opposing undesired Federal legislation, and on May 4 your secretary wired each of the two senators and 13 congressmen from Michigan the following message:

"This Association representing a large percentage of the shippers of grain and hay in Michigan dealing with the farmers, urge you, a representative of all the people, to exert your influence in producing only sound constructive legislation, embodying sound economic principles. It is the opinion of the members of our Association, including many co-operative associations, that the proposed relief measures which are now under consideration in the Senate and House, are not designed along sound economic principles, and all price fixing or surplus controlling schemes necessitating the expenditure of the taxpayers' money, which might temporarily benefit the farmer, would undoubtedly harm the farmers in the end, and would put the Government into business and establish a precedent which would make it extremely difficult to refuse other producers of goods similar assistance. The present general strike in England should serve as a warning to this country against the very serious results of injecting Government into business during peace times. Please vote against the passage of the Haugen and Tincher Bills."

A bulletin was mailed to each of our members, which contained a copy of the above message, with a request that they wire their congressman and senator a similar message of protest against voting favorable on either of the bills mentioned. With similar protest wired in to Washington from practically all of the other agricultural states the result was that both bills were defeated when offered for a final vote. I am pleased to advise that from the letters I received from our senators and congressmen in answer to my telegram, I found that a majority of them were not disposed to support either bill, and the final vote proved that they had not been induced to change their minds.

Membership and Dues

When I rendered my report at our last annual convention, our membership was 124, with all accounts for dues paid in full. During the last 12 months we have taken in 33 new members. We have lost during the past year 20 members, six resigned, four went out of business and six were expelled by your Board of Directors because of non-payment of dues.

In addition to these, there were removed from our midst during the past year by death, two gentlemen who were members of firms which have been active members of our Association, Mr. Allmendinger of the Michigan Milling Company of Ann Arbor, and Mr. Frank Diamond of G. F. Diamond & Co., of St. Johns. Mr. Allmendinger was one of the pioneer millers of Michigan and while his age has not permitted him to take a very active part in Association work of any kind the past 10 years, his wise counsel was always available to those who asked for it. Mr. Diamond was a man considerably younger than Mr. Allmendinger, and for several years has taken an active part in Association work. During the period in which I have served this Association as its president, also its secretary and treasurer, I always found Mr. Diamond ready and willing to help me in my work, and I for one will surely miss him greatly.

Our active membership as of July 1 last, stood at 141, showing a gain over the previous year of approximately 14 per cent, which I consider a good showing considering the unsatisfactory conditions under which all of us had to do business, during the 12 months preceding July last. It also clearly illustrates what can be accomplished by concentrated effort. If every one of our present members would pledge themselves here today, to secure at least two new members during the next 60 days, the increased working funds which would be available from dues received, would enable us to render a report of accomplishments, at our next annual convention, which would fully repay all of you many times, for the assistance you had rendered in increasing our membership. We can just as well have 400 active members as 141. There are between five and six hundred shippers of grain and hay in Michigan, so you will see there is plenty of opportunity for all of you to help in this work.

District Meetings

Two years ago we discontinued the holding of our mid-winter meetings and decided on a plan of holding district meetings in various parts of the state, at which problems of a local nature could be discussed and an effort made to arrive at a solution. This past year we held two such meetings, one on September 25 at Kalamazoo and was sponsored by Ex-President White. There were about 130 grain and hay shippers, and flour millers in attendance and we had a fine time enjoying the good music and addresses provided, also in taking part in the discussions of subjects which effected our business.

The second meeting was held at Owosso on October 20 and was attended by about 80 shippers. The speaker for the evening Mr. Ward, of Jackson, was unable to be present, therefore the evening was devoted to the discussion of local problems.

We have proven beyond the question of a doubt from the meetings held, that more good can be secured from them than by holding a mid-winter convention, therefore I desire to recommend to our

president-elect that at least four of these district meetings be held this fiscal year between September 1 and March 1, one at Battle Creek or Kalamazoo, one at Owosso, one at Saginaw and one at Alma, and that each meeting be announced to the shippers of each district at least three weeks in advance so they will all have plenty of time to make their plans to attend, and come prepared to present their local problems for discussion. These meetings give us an opportunity to get better acquainted with our competitors and develop a more friendly feeling towards one another, and by personal contact and conversation iron out numerous matters, of petty nature, which might develop into larger problems if allowed to continue.

Association Service

Our bulletins are always open for the publication of suggestions or recommendations from our members which will be of benefit to fellow shippers of grain and hay. We are always glad to publish want ads for labor or second-hand elevator or flour mill equipment. If you have a gasoline engine, electric motor, grain cleaners or other equipment for sale, send me by letter a complete description of each article, and I will publish the list in our next bulletin and try to help you find a buyer.

For the last two years I have been conducting an information bureau for the benefit of our members. Of the data supplied, a large part covered financial and reputation ratings of prospective customers, recommending reliable concerns to handle rejected shipments of grain and hay which were under demurrage in some southern or eastern market, also furnishing the names of manufacturers of new elevator equipment of all kinds. We are still compiling a list of undesirable trade in grain and hay, that is, dealers who have been found by our members to use unethical tactics in the conduct of their business. Don't fail to advise your secretary full details of any experience you may have had with such people, as by so doing you can prevent losses for other members. Our present list has proven its worth many times during the past year to members who have phoned your secretary for information regarding the reputation of prospective customers, before attempting to trade with them. The cost of a telephone message is small when compared to losses that might be sustained by taking a chance.

Last but not least don't forget our Arbitration Committee, and the service it is ready to render you. Private arbitration of disputes saves much of the cost of litigation, cuts down the time of settlements, gets the money and washes the slate clean, it avoids the terrible congestion of the courts, and allows settlement at the hands of arbitrators who know the trade practices particular to the dispute. Arbitration tends to produce quick justice, cutting sharply to the issue and settling it. It provides a system of business men's courts, by, for, and of business men.

In conclusion allow me to say this: Let us give to our officers during this fiscal year that service that money can not buy—that cannot be measured, that cannot be forced, for which the greatest return is the satisfaction of knowing that we have done our best, loyally and unselfishly, for the organization as a whole.

Following this, R. I. Mansfield, of Bartlett Frazier Co., of Chicago, spoke on "The World Wheat Situation." His address, in part, is quoted below.

THE WORLD'S WHEAT SITUATION

Last June Europe was bending every effort to exceed last year's harvest figures. Our United States crops were just in the making and approaching maturity rapidly. Uncertainty pervaded the atmosphere both here and abroad.

Nature bestowed her favors with a lavish hand in our winter wheat regions but withheld her generosity in spring wheat country. She was equally niggardly with Canada and Europe. The world's great need was a liberal surplus for this crop year, but unfortunately that hope has faded, and the world again faces a closely adjusted supply and demand situation this year as she did last.

At the beginning of our present crop year, according to such eminent authorities as Broomhall—Sir James Wilson, the International Institute at Rome and lesser statisticians, a balance sheet supply and demand showed the amazing fact of a deficit of 11 million bushels, or to put it more positively, a world shortage of that amount.

High hopes were held that some surplus producer would come through with a bumper crop and relieve the situation of inadequate supplies abroad prevalent the past year. But such does not appear in the survey we shall presently make and it is an admitted fact that an exceedingly close adjustment between supply and demand will again prevail.

Let us go back to old-fashioned methods and enumerate the world's buyers and sellers of wheat in the order of their relative importance.

As buyers: The United Kingdom, Central and Northern Europe, the Orient.

As sellers or surplus producers: Canada, United States, Argentina, Australia, Russia, India.

One can consider the first group as a whole as they have suffered a similar experience with crops this year.

France is largely a concrete example of them all. Aiming for a crop of 330,000,000 bushels or more (last year's total) she finally winds up with 263,000,000. Broomhall has just issued a preliminary estimate this past week showing an import need of 704,000,000 bushels and a probable world's surplus of 768,000,000 bushels. Commenting on this an eminent New York authority says:

"Yesterday's Broomhall report—The latest returns on the European crops (exclusive of Russia) indicates a decrease in the wheat and rye production with a number of countries to hear from, of approximately 200,000,000, yet, world's requirements have been increased only 20 per cent or possibly 39,000,000 over actual disappearance last year to make up a shortage of approximately 200,000,000. It also must be remembered that the estimates of surpluses include reserves of old wheat and there never has been a time in the history of the grain trade when it was possible to export all the reserves of old wheat in different countries at the end of the European crop year. Accepting Broomhall's estimate of reserves and requirements this year as correct, there is a surplus of only 64,000,000 bushels in world's surpluses compared with world requirements this year, while last year in his preliminary estimate there was a surplus of 150,000,000. The figures on their face show that the margin between surpluses and requirements this year is nearly 100,000,000 bushels closer than it was last year.

Now let us turn to the surplus producer or sellers in the order of their importance—

Canada: Started out with a prospect for a bumper crop on a moderately increased acreage and maintained it well up into June. But the law of averages was working against her and after producing two

record yields in three years previous, it was hardly possible for her to come through with a third such large crop. Drought and heat took their toll of Canada and from a 400,000,000 outlook, she officially estimates her crop at 317,000,000 for all Canada.

The United States had a most favorable Winter wheat season and yields generally far exceeded expectations. The quality was unusually high and the last Government estimate suggests 626,000,000 Winter wheat vs. 398,000,000 last year. While Spring wheat fared very badly under the same causes that reduced the Canadian crop and a yield of 213,000,000 bushels vs. 270 for the final of last year.

The total crop in the United States is, therefore, 839,000,000 against 669 for all wheat last year.

It would be unfair to pass over the record of the present Winter wheat movement without a word of appreciation of the wonderful manner in which the grain trade and marketing machinery functioned under the greatest wheat movement ever seen in our country. Prices and premiums were not only maintained, but actually advanced and the Winter wheat farmer received a gradually advancing return for his wheat, although export demand was at times a negligible quantity. Millers and cash buyers competed for the avalanche of high quality new wheat that poured into the primary markets. Our hats are off to the Southwest trade for this unequalled record and it will require some system to even equal what the present one has recorded on the 1926 crop.

Argentina is an uncertain factor. It is too early to predict much about her growing crop, suffice to say that the acreage is somewhat smaller and that early indications suggest a crop of approximately the same as last year. They are still fearful of another black rust visitation and developments there will be closely watched the next 90 days and will have a marked influence on foreign action and sentiment. Present prospects suggest about 100,000,000 bushels exportable surplus for Argentina this year.

Australia is in much the same position as Argentina. It is too early to form any definite conclusion as to her wheat crops this year. The acreage seeded is about the same as last year, possibly a little larger. In this connection it might be well to recall that the Canadian Wheat Pool has loaned its Advisory Board to the Australian Farmers Association to set in motion similar machinery to that operating in Canada, which means that Australia will market her crop under the restraining influence of a farmers' pool. This new development places Australia in a rather different position than last year as regards marketing at least.

Russia is the unknown quantity in the grain world. A giant shackled and asleep. Capable of enormous production, but made ineffective by Bolshevism and internal disorders. Last year she made glowing and spacious promises of enormous surplus, but her fulfillment was a pitiable travesty on the bombastic claims of those high in authority. Untold millions of wheat were to flow to needy Europe and extensive forward commitments were entered into, only to be defaulted on so that today the world has adopted a Missouri "Show Me" attitude toward Russian statements, official or otherwise. The best information suggests she will have forty millions of wheat to spare in 1926 or the same as in 1925.

India is another decadent producer. She formerly was a factor in world production but of recent years has declined in production until now she contributes a pitiful eight to ten million bushels to outsiders and at times is an importer as well. Broomhall gives her sixteen million surplus this year against last year's eight million.

We have now covered the major producers of world's wheat and briefly touched on consumers' needs.

There is a growing and important consumer that is worthy of passing mention and that is the Orient. As civilization and education permeated the Oriental life, American customs and food replaced the meager rice and vegetable diet of their early civilization. Then, too, American women become enormous buyers of Japanese silk hosiery and far eastern lingerie and western money flooded the Far East and permitted a constantly rising standard of living. White wheat bread and whole wheat flour became staples of food and they have been absorbing larger amounts of the raw material (wheat) in Canada and our Pacific Coast, as was evidenced by their heavy purchases last year of the early Canadian wheat run.

This year a terrific drought devastated Manchuria, Korea and the Japanese Isles, destroying native grain and vegetable crops and making for larger import needs the coming season. What affect this will have on the world situation remains to be seen. Wheat bread is the cheapest and best food on earth. Any miller present at this convention will admit this. The Orientals are a shrewd, long-headed race, capable of figuring food values as they do the profitable selling price of silks, hosiery and undergarments. They are likely again to be a factor as they were last year. At any rate, the grain trade had better reckon them in their calculations.

Now, let us draw all these facts together. We will assume Broomhall's figures to be correct and we shall show a balance sheet about as follows:

Surplus		
	This Year (million)	Last Year (million)
Canada	248	280
United States	200	80
Argentina	120	184
Australia	88	80
India	16	8
Danube	48	64
Russia	40	40
Others	8	16
Total	768	752
Import Needs		
	This Year (million)	Last Year (million)
U. K. and Continent	560	505
Ex-Europe	144	96
Total	704	601

As stated earlier it seems incredible that on a world's crop deficient two hundred million bushels, that only 20 per cent increase or about 39 millions more wheat will be needed than last year to fill this large need.

It will also be well to remember that this same authority showed a world's surplus of one hundred fifty million bushels only to reduce it to a world shortage at the close of the last crop year.

This may be a new style of figuring abroad, but our United States paper and pencil with common sense back of it does not arrive at such a result and it will be well for the surplus nations to carefully remember this.

This is especially important this year as Europe's rye crop falls far short this year and will intensify the wheat situation.

Two years ago, under the influence of a similar close adjustment large speculation and investment

buying accompanied by hysterical purchases of United States and Canadian wheat carried prices to the memorable 205 level in Chicago. This was followed by drastic declines as economy, substitution and native crops relieved the impending shortage abroad. This year substitution will be more difficult, economy more pronounced and the financial stringency in all Europe and the United Kingdom will cause hand to mouth purchases.

One thing appears certain, however, and that is that the world situation does not suggest any low prices. Another is that foreign governments sensing the political and economic unrest within their borders will strain every effort to keep the native bread baskets filled or there will be further overturning of political parties and powers and this they will all strive in every human measure to avoid.

Among the other important addresses was one by H. E. Wilson, general agent of the Millers Fire Insurance Company, Lansing, who discussed the necessity of co-operation.

The report of the Board of Directors was presented by First Vice-President E. Bueschlen, of Unionville. He said:

REPORT OF THE BOARD OF DIRECTORS

Co-operation or the uniting of effort means the pooling of trade experience and resources, the gathering of technical knowledge, and the inspiring of confidence in each other, so that grain and hay may fill their merited place, and the business of producing and marketing these products of the farm be placed on a higher level. It was to pool such effort and hasten its accomplishments that our state Association was first organized, and later the organizing of local associations, and to the credit of those who, during the past 25 years, have served as officers and directors, it must be said that their efforts have brought about some wonderful improvements in the handling of local, state and national problems and marketing of the commodities we are so vitally interested in, during that period of time.

The functions of our state Association are, to gather and dispense reliable information, both scientific and practical in respect to growing and preparing for market hay and straw, as well as all the varieties of grain and beans produced within our state. To give information, educational and personal to both the public and the members of the Association. To try to protect our membership from the unreliable, dishonest, fly-by-night shippers or receivers.

TRANSPORTATION

WHEAT RUSH SLACKENS

After a record out-movement of the bread grain harvest, the Oklahoma wheat exodus is slowing up. By September 1 a volume was leaving the state each day only half as great as the average for August. Rains, a lower market, fall ploughing on the farms, and full elevators, account for the slump that has continued so far into the middle of September.

LONG SESSION AHEAD

Indications now are that the hearing on the six-cent grain rate reduction, proposed by the M. & St. L. Railroad, which began in Minneapolis September 13, will consume at least a week's time. Northwestern interests whom the rate will benefit are making a great effort to offer every bit of pertinent evidence available in order to put it through. Opposition from the southwestern, central and eastern areas, have prepared rebuttals which are on tap.

"BIG DITCH" TWELVE YEARS OLD

In a brief statement the War Department announces that, on August 14, 1926, the Panama Canal completed 12 years of operation, having been opened to commerce on August 15, 1914. In the 12 years, it said, 35,560 commercial vessels had passed through the canal, on which the tolls paid aggregated \$145,043,734.55. Approximately 70 per cent of the total transits and 76 per cent of the total tolls collected had been in the last six years of operation, the Department said when making the analysis of the situation.

GULF PORT PLEA DENIED

An order refusing to distribute the existing relationship of grain rates to Gulf ports from southwestern territory, has been entered by the Interstate Commerce Commission, which denies the appeal which was made by the New Orleans Joint Traffic Bureau.

The New Orleans plea was based on the contention that in fixing gulf grain rates in June 1925, the Commission had unjustly favored Texas ports which were competing for traffic. Reconsideration, therefore, was asked in the somewhat belated appeal from the Crescent City.

NEW QUAKER LADING BILL

Effective as of September 1, Furness, Withy & Co., Philadelphia, Pa., put into force a new form of ocean bill of lading for grain cargoes out of Philadelphia. Indicating a willingness on the part of the company to co-operate at greater length with the shipper than heretofore, the change marks a very important forward step in marine practice. Other

To endeavor to keep our members in touch with conditions with respect to freight rates, also car service, and to work with other organizations of hay, grain, beans and feed shippers, both state and national, to fight our battles in keeping such rates and charges from becoming prohibitive.

To keep our members informed through the medium of our bulletins, so ably prepared by our secretary, of any legislation both state and national which would in any way affect their business.

The Association has a legislative committee of three members who shall examine into any existing or proposed national or state legislation affecting the interests of the Association, and shall, with the consent of the Board of Directors, advocate by all lawful means the passage of such legislation as may be beneficial to the members of the Association, and also by the same means endeavor to prevent enactment of any legislation they might deem harmful to the members, or their interests. Your committee has been active this past year, working with affiliated Associations in endeavoring to stop enactment of several bills they deemed harmful to our members.

The Arbitration Committee of the Association consists of three members whose duties are to settle disputes between members without a long drawn out litigation.

Our secretary has on file a list of firms who have been found unworthy of business confidence, and should you be in doubt relative to any shipper or receiver, get in touch with your secretary and he will get for you immediately the required information.

The most important of the resolutions adopted was one in which the project of making the St. Lawrence River navigable for sea-going ships was endorsed. Thanks were recorded to Christian Breisch & Co., Chatterton & Son, Michigan Elevator Exchange, Young Bros. Hay Company and Ryan Grain Company for their entertainment and assistance in making the convention a success.

The following officers and directors were elected for the ensuing year: E. E. Bueschlen, Unionville, president; L. E. Osmer, Lansing, first vice-president; Guy M. Rowell, Yale, second vice-president; T. J. Hubbard, secretary and treasurer; directors for two years, G. C. Marotzke, Sebewaing; John McFarland, Merrill; R. E. Ward, Jackson; director for one year, M. R. White, Scotts.

firms are expected to follow shortly, the Wilson line, of New York, having announced this intention recently.

The form as issued, is known as the "shipped on board", because of the opening phrase of the lading agreement. Further, the carrier indicates that a definite service is undertaken, by continuing to state that the cargo has been shipped on the named vessel "to be conveyed and delivered" to a certain destination, barring unforeseen accident or conditions. This is in contrast to some forms of ladings, which use the old phrasing "received on board for delivery" by a vessel; or through hidden clauses, relieves the vessel or line of the reasonable responsibility of a common carrier.

SLAV EXPORTS TO INCREASE

According to a dispatch received by the Department of Commerce, the central committee of the Communist party in Moscow, U. S. S. R., has held a conference at which the export schedule for the current year was the chief consideration. The forthcoming grain crop was officially estimated at 240,000,000 bushels more than last year's harvest.

After deducting Russia's requirements it was estimated that there will be left for export and "other requirements of the Government" 420,000,000 bushels. The committee accordingly decided to increase exports of grain this fall, and to take measures insuring such prices on the home market as would make the grain export trade a profitable business in which to engage.

PROTEST FROM ALABAMA

A formal complaint in behalf of 17 Birmingham, Ala., grain dealers has been filed by the Birmingham Traffic Association, with the I. C. C. A lowering of rates is sought on grain and grain products from Ohio and Mississippi River crossings to three Louisville & Nashville Railroad stations, when these commodities are accorded transit in Birmingham. It was pointed out in the protest that the Louisville & Nashville Railroad now permits transit at Nashville, Tenn., on the same basis as transit is accorded at Birmingham, but that the rates applicable by the way of Nashville, Tenn., range from 40 to 100 per cent greater than the rates applicable by the way of Birmingham.

In other words, the Louisville & Nashville will take grain at St. Louis, for instance, haul this grain by the way of Nashville, accord it transit at that point, take it to Humboldt, Tenn., turn it over to the Mobile & Ohio Railroad for transportation to Mobile and from there by the Louisville & Nashville to Flomaton, Ala., for lower rates than by their own line direct down through Birmingham and Montgomery when the transit is accorded at Birmingham.

FIELD SEEDS

ST. LOUIS SEED FIRM IN NEW
QUARTERS

Considerable interest was manifested a month or so ago in the announcement of the incorporation of the Corneli Seed Company of St. Louis, Mo., which will handle an extensive line of field and garden seeds from that city. The new firm, which will be exclusively wholesale, has taken over the wholesale end of the well known Schisler-Corneli Seed Company, which has been doing a big seed business in St. Louis for 31 years.

The new headquarters of the company have been completed at 303 South Seventh Street, a building with six floors of warehouse space. It is particularly adapted to seed storing, refining and handling and is equipped with the latest improved machinery, elevators and conveyor systems. Alterations on the inside of the building shown in the accompanying photograph, were almost completed the first of the month, two sets of elevator legs and a five-story spiral chute remaining to be finished.

One of the chief reasons for selecting the Seventh Street location is its accessibility to the main ar-

Louis, serving that company as secretary for the past several years. He is, by reason of his knowledge of the business and general business ability, well fitted for his duties with the company and will contribute much toward its success.

Mr. Kelle and Mr. Palmer have spent several years with the Schisler-Corneli Seed Company, occupying various capacities and have a thorough knowledge of the seed business. They, too, are well equipped to assume their responsibilities with the Corneli Seed Company.

The personnel of this new enterprise possesses the attributes necessary for growth and expansion, and it is a general prediction that success will be theirs from the start. A good start has already been secured for present sales have exceeded those for the same period last year by 40 per cent.

REDTOP SEED CROP MOVEMENT
BELOW NORMAL

Redtop seed movement has been slower than last year and than usual. The United States Department of Agriculture estimates that about 10 per

cent of the crop had left growers' hands by August 24, compared with 40 per cent last year, 20 per cent two years ago, 5 per cent three years ago, and 21 per cent, the average for 1919-1925 up to a corresponding date. Growers have been dissatisfied with prevailing prices and many of them are holding their seed.

On August 24 mostly 20-22 cents per pound for cleaned or "fancy" seed were being offered to growers. These are the highest prices for that date on record in the Department. The average prices offered on a corresponding date in other years were as follows: 18½ cents in 1925, 11 cents in 1924, 10 cents in 1923, 14½ cents in 1922, and 13½ cents for the period 1917-1925, inclusive.

ing to note that this book enumerates the work of 101 various institutions devoted to plant breeding and seed growing. Some of them are only small experimental fields while others are very elaborate institutions, like the Institute of Applied Botany.

"This organization is doing splendid work under the directorship of N. I. Vavilov, who has visited this country and is known to many of our leading agriculturists. The Institute of Applied Botany issues a periodical known as the Bulletin of the Applied Botany and Plant Breeding, and this year, three volumes have been issued thus far.

"Among the articles discussed in the recent numbers of this bulletin, the following might be of particular interest: 'The Distribution of Most of the Important Forage Species of Clover and Alfalfa,' 'Materials for Determination of Most of the Important Forage Vetches,' and 'Botanical Agronomical Investigations of Vetches.'

"Of particular interest to the American farmers is the fact that Russian plant breeding stations are devoting considerable time to the development of new resistant and hardy varieties of Red Clover, Alfalfa and Vetches, and undoubtedly, due to the severe climate of Russia, they will be able to produce in the near future, varieties of these forage plants which will be of particular benefit to the American farmers."

HALT QUARTER OF SEED IMPORTS

Crimson Clover seeds which yield broken sprouts in part-of-entry seed trails, do not produce seedling when tested in soil, and are of no value for seeding purposes. For that reason, during the six months ended June 30, 1926, 13 shipments of Crimson Clover seed, aggregating 2,050 sacks, were prohibited entry under the Federal Seed Act, formerly designated as the Seed Importation Act, on account of low germination, according to a report of the Department of Agriculture. This was out of a total of 54 shipments, comprising 8,034 sacks, offered for entry. In most cases this low germination was due to the presence of a large proportion of seeds which gave broken sprouts when tested on absorbent paper in germination chambers.

SEED ANALYSTS MEET

Over 900 delegates were in attendance at the International Congress of Plant Sciences held at Ithaca, N. Y., in conjunction with which the Official Seed Analysts' Association of North America and the Commercial Seed Analysts' Association met.

Interesting and decidedly valuable addresses were made before the meetings on August 16 to 21 on the following topics: Legislation and control; purity analysis work; seed germination; and methods. The Saturday program included an excursion to the New York State Experiment Station at Geneva with a visit to the experimental fields and seed testing laboratory.

The following officers of the Official Seed Analysts' Association were elected: President, W. H. Wright, Toronto; vice-president, Dr. E. H. Toole, United States Department of Agriculture, Washington, D. C.; secretary-treasurer, A. L. Stone, Madison, Wis. The Commercial Analysts' Association elected the following officers: President, W. C. Pfaender, Albert Dickinson Company, Chicago, Ill.; secretary-treasurer, Miss M. L. Spracher, Northrup, King & Co., Minneapolis, Minn.

THE "MANUFACTURE" OF SEEDS

Under the ever advancing standards of what is good seed, seeds have become somewhat a manufactured or factory product, involving the use of complicated machinery, laboratories and expert bacteriologists. The raw material is the seed as it comes from the farm with its quota of weed seeds, chaff, dirt, and broken and imperfect seeds.

When it arrives at the seed house the factory process begins at once by means of machinery. It is complicated but of growing efficiency and the seed is purified in a hurry and after it comes from the machine it is seed only of the plant desired.

Then the scientists begin their work to determine whether the seed has good germinating ability. It is also examined by bacteriologists for the presence of fungus pests to determine if treatment to kill the fungus spores is necessary. When all the processes are complete the seed is ready for the market and the buyer may know just how pure the seed he buys is and what germination he may expect. He is also informed in many cases as to its adaptability for his section of the country if he desires this information, necessary in the cases of corn and Alfalfa, and a few other grains.

Owing to the great amount of work necessary



HEADQUARTERS OF CORNELI SEED COMPANY, ST. LOUIS, MO.

teries of traffic, as most of the highways of Missouri and Illinois lead to that section of the city. Towns within a radius of 100 miles of St. Louis are served every day by trucks, and the building is ideally situated to assure quick service. There are three loading doors and a large platform, making it possible to load several trucks without delay. A large parking lot adjoining the building has been acquired for the convenience of the customers of the seed company.

The officers of the company are: Clifford Corneli, president; Dillon T. Stevens, vice-president; T. Maurice Scott, secretary; and Elmer C. Kelle, treasurer. Edward C. Palmer has been appointed sales manager.

Clifford Corneli is prominent in seed trade circles and is well known to everyone in the business. He has been connected many years with the Schisler-Corneli Seed Company, a business established in 1895 by his father, the late Ben P. Corneli, and his uncle, Adolph Corneli. His long association with the former company and the splendid training received there makes Mr. Corneli well fitted to head the new organization.

Dillon T. Stevens, while not having actually been engaged in the seed business, has had an extensive experience in various branches of agriculture. He was formerly connected with the Texas Agricultural Extension Department and later owned and edited an agricultural paper in the South. Recently he has been successful in several large merchandising capacities in St. Louis.

Maurice Scott is probably better known to the grain men of the country than the other members of the firm. Since a boy he has been active in the Picker & Beardsley Commission Company of St.

SEEDS IN RUSSIA

"Russia with its immense area of agricultural land and variety of climate furnished this country with a number of very desirable immigrant plants. Some of the leading varieties of wheat, rye, oats and barley, as well as many of our forage crops have originated in Russia" says J. W. Pincus of the Amtorg Trading Corporation, New York City.

"It is, therefore, very gratifying to note that notwithstanding 10 years of civil war and revolution, Russia has not stood still in its plant breeding and seed growing work. Recently the Russian Department of Agriculture issued an interesting volume containing over 400 pages, describing fully the work of plant breeding and seed growing in Soviet Russia from 1914 to 1923.

"While the bulk of the book is in Russian, there are about 50 pages devoted to a review of the work in English by Professor N. I. Vavilov. It is interest-

to bring the seed up to the grade now demanded by the trade it is much more expensive than seed bought off the farm just as it is harvested but the added expense is an economy when the crops are considered. The planting of seed only partly cleaned or not cleaned at all is merely perpetuating a fine growth of weeds in the field with a corresponding diminution of production per acre. Pure seed is a real economy and a money maker.

OLD SEEDS UNDER NEW NAMES

There is the saying that "a rose under any name would smell as sweet." It is equally true that seeds under any name will bring the same results but frequently a new name is used to bring the promoter higher prices. This point is emphasized by Waldo Kidder Extension Agronomist, in his bulletin "Small Grains for Irrigated Farms in Colorado."

He says "Many farmers plant expensive seed which has been highly advertised as a new or wonderful crop only to find it an old variety given a new name by a promoter." He believes in greater standardization on the proved varieties of oats, wheat, barley and corn and names some of those best adapted to the irrigated Colorado lands.

NOTICE FOR BEAN ELEVATORS

Recommended standards for beans were issued by the United States Department of Agriculture effective September 1. The standards embody slight revisions from the tentative standards issued in August 1925. The revisions are based on the results of further studies of the dry edible bean industry and recommendations of the trade made during the past season. The changes do not affect the general construction of the standards and, except for more tolerant limits on grade factors in grades for Great Northerns, serve only to clarify certain important features of them.

The standards comprise 19 commercial classes of beans which include all of the leading kinds grown and marketed in the United States. They will provide an equitable basis for uniform grading of beans and are recommended for adoption and use by all agencies concerned with a view to facilitating the marketing of this commodity. Copies of the standards, together with information regarding their application by Federal licensed inspectors, may be obtained upon request to the Bureau of Agricultural Economics, United States Department of Agriculture, Washington, D. C.

GERMINATION OF IMPORTED CRIMSON CLOVER SEED

During the six months ending June 30, 13 shipments of Crimson Clover seed, aggregating 2,050 sacks, were prohibited entry under the Federal Seed Act, formerly designated as Seed Importation Act, on account of low germination, according to a report of the United States Department of Agriculture. This was out of a total of 54 shipments, comprising 8,034 sacks, offered for entry. In most cases, this low germination was due to the presence of a large proportion of seeds which gave broken sprouts when tested on absorbent paper in germination chambers. Crimson Clover seeds which give broken sprouts in chamber tests do not produce seedlings when tested in soil, and are of no value for seeding purposes.

Attention is called to this condition with the hope that the seed trade may arrange their contracts for imported Crimson Clover seed to preclude this type of seed being shipped to the United States. Crimson Clover seed which does not meet the minimum requirements of the Federal Seed Act as to germination is for the most part impossible of reconditioning and can, therefore, be disposed of only by destruction or export.

CARDBOARD CANS FOR SEED

One of the mighty trivialities, or at least one of the important details in a seed dealer's business, is the packaging of his products. There is an ideal type of container for every seed and for every type of trade. Mail order business, farm trade, and local trade all present different sacking or packaging requirements. Recognizing the wide interest in packing methods today, *Package Advertiser* has recently broadcasted a questionnaire to many different types of concerns using packages of one kind or another.

Among the replies is the statement of the Barteldes Seed Company, containing this information: "We are very much pleased to report that we find fibre boxes entirely satisfactory for our purpose. We use corrugated fibre boxes exclusively in shipping garden seeds. These garden seeds are packed in cardboard seed cans and these in turn are packed in the corrugated fibre boxes without any extra packing. Our boxes are sealed with silicate and this work is done by hand. Jayhawk boxes are proving to be satisfactory."

In the last four years, remarkable developments have taken place in scientific packaging. The subject has been attacked from two angles. The sub-

problem has been to get a serviceable package. The second consideration has been making the package help sell the goods.

Should any of our readers have new wrinkles in seed packages, which make for greater serviceability, or greater "merchandisability," we would like a description for publication in these columns. An exchange of packaging ideas will benefit all participating.

SEEDS FOR THE PENINSULA STATE

Long before the last Florida boom was even thought of, in 1910 to be exact, a man hailing from Texas saw the agricultural possibilities of the state and decided to take a chance as establishing a good business in the state, by handling seed of the highest possible grade. So on February 22, 1910, H. M. Kilgore organized the Kilgore Seed Company at Plant City, Fla., which is but a few miles to the northeast of Tampa, and in an admirable position to meet the demands of the farmers in a decidedly prosperous section of the state.

The company prospered as Mr. Kilgore intended it should and today the company owns and operates seven retail stores and covers the entire state with mail order business issuing both spring and fall catalogues. Last fall the company completed a new warehouse at Plant City which was found necessary to meet the demands of its clientele. Mr. Kilgore is president and manager of the company and F. Z. Kilgore, secretary and treasurer. In addition to field and garden seeds—the company imports and distributes these—the firm also handles



H. M. KILGORE

fertilizers, incubators, insecticides, sprayers, stock and poultry remedies and supplies.

Mr. Kilgore was born in Texas, and educated in the public schools of Beaumont. He came to Florida when 20 years of age and in 1910, as mentioned before, started the Kilgore Seed Company at Plant City.

ARGENTINE REGISTERS SEED

Under a recent order of the Argentine Minister of Agriculture there was created in that republic a register of seed producers in the Department of Agriculture.

Seed producers desiring to be listed in this register, thus obtaining official approval of the seed offered for sale, are asked to submit samples to technical examination by experts of the Department. To the producers of seeds so approved will be granted an official certificate of approval. The administration of the order is placed in the "Direccion General de Ensenanza Agricola," a division of the Department of Agriculture.

ALFALFA AND CLOVER IN WISCONSIN

Commenting on the progress which both Alfalfa and Sweet Clover have made in Wisconsin, L. F. Graber of the University of Wisconsin, Department of Agriculture, says:

Permanent pastures have failed for a long time to maintain an adequate supply of summer feed. In their early spring growth, pasture grasses have a wonderful effect on milk production, but with the oncoming of July and August, these shallow-rooted crops dry up and produce an inadequate supply of nutriment. It is here where Sweet Clover comes in. It is one of the most drought-resistant of all our legume plants. It will grow in dry weather where even Alfalfa is seriously injured. In one demonstration Sweet Clover made a growth of 25 inches, while Alfalfa, seeded at the same time and in the same way, grew 13 inches, Alsike 12 inches and Red Clover only 10 inches. Its pro-

duces a succulent growth of rich high-protein feed during the dry period of July and August when the average permanent pasture is almost completely unproductive. It has the further advantage of large carrying capacity. An acre will support one cow or more for the full season. Many farms have areas of land which should not be plowed and the growth of Sweet Clover on some of the regular fields will tend to eliminate the usual over grazing that is always injurious to a permanent pasture. Sweet Clover is making tremendous progress throughout the state and has been given as much time and attention as has Alfalfa.

Among the surprising developments of Wisconsin's Alfalfa acreage during the past two years has been the rapid increase in acreage of this crop in northern counties, once heralded as "the Cloverland of America." On these newer soils Clover thrived in great abundance. In recent years on the older fields, it has become harder to grow and even where good stands were established, its productivity has fallen off. With the utilization of marl, paper mill waste and other cheap lime products, Alfalfa is invading the north with amazing rapidity. Counties which a few years ago grew but a few scattered acres are now listed in the thousand-acre class.

FLAX IN GOOD DEMAND

In a recent statement from the Department of Agriculture at Washington, warning against increased acreage of crops this year, flax was noted as one of the few crops that could probably be increased. Flaxseed has been a money crop of the pioneer farmer in days gone by. The newly broken land often was put in to flax. Consequently, the growing of flax has been continuously moving westward to newer land. The Dakotas and Montana are leading flax growing states. The figures are rather striking of the early days of flax. Montana in 1899 grew 220 bushels of flax. In 1912 the crop reached a total of 5,520,000 bushels. Other states have similar records, the crop decreasing with the increase of cultivation.

Flax is one crop that needs the expert care of the seedsman with his seed-cleaning machinery more than any of the other agricultural staples. Clean, plump seed is absolutely necessary for best results. The flax is of very delicate slender growth in its early stages and a weedy field will choke it out and smother it. Absolutely clean, weed-free seed is the most important factor in successful flax production.

Flax is usually sown on new ground because when grown on the same field for several seasons, it is not uncommon for disease to become prevalent so that the yields are too low to be profitable. Freshly broken prairie sod does not contain these disease germs as a rule. It is estimated by experiment stations that a six to eight-year rotation is necessary in flax growing as the fungi which attack the flax will die out in from five to seven years. Flax is not "hard on the land" as has frequently been claimed. It does not remove as large an amount of the elements of fertility as do wheat, oats, barley or corn. Its main bad effect is that it is a shallow rooting crop and may dry out the top layer of soil and thus temporarily reduce crop yields.—W. G. S. D. A.

GRADING FACILITATES CORN PLANTING

There are many factors which contribute to the accuracy of corn planters, but one of the most important of these, says the Colorado Agricultural College in a recent bulletin, is the proper grading of the seed. The regularity of the size of the kernel determines to a great extent the facility with which a field may be planted.

The corn should be tipped and butted, although the latter is not of great importance if the plate is of the round hole type. But above all, the corn should be graded to insure uniformity.

SEED ACTIVITIES IN WISCONSIN

By C. O. SKINROOD

Wisconsin is expected to have a first class crop of Clover seed this year according to leading Milwaukee seedsmen. While the crop is not threshed yet, the crop is far enough along so that some careful estimates can be made, it is believed.

The market for Red Clover seed on the other hand has been every strong and advancing, according to local reports. This is believed to be based on the fact that the Red Clover seed crop is not so good in other states as it is in Wisconsin. Other seedsmen declare that Clover seeds are not likely to go down to any great extent for many years. This prediction is based on the fact that comparatively few farmers raise Clover seed and there are more and more buyers.

The Alsike crop is large in Wisconsin, say Milwaukee seedsmen who find that the Alsike coming in is not only of fine quality but the supply is believed to be quite large.

The White Clover crop of Wisconsin is reported

(Continued on Page 179)



ELEVATOR AND GRAIN NEWS

MINNESOTA AND WISCONSIN

A new elevator is to be built for the Farmers Elevator Company of Karlstad, Minn.

The McLaughlin Elevator at Red Wing, Minn., is under the management of Olaf Kindseth.

The Farmers Elevator at Winthrop, Minn., has been equipped with a new Carter Disc Separator.

A new cleaner has been installed by the Farmers & Merchants Elevator Company of Argyle, Minn.

A wheat grading department has been added to the Farmers Produce Company of Belle Plaine, Minn.

The capital stock of the E. Liethen Grain Company of Appleton, Wis., has been increased to \$75,000.

J. D. Franklin of Douglas, N. D., is the new manager of the Farmers Equity Elevator at Parkers Prairie, Minn.

Terrence Linnihan of Matawan is now the manager of the Taopi, Minn., elevator of the Hunting Elevator Company.

The Holacek Elevator near Brushvale, Minn., has been bought by Milo Billings of Minneapolis, formerly of Wahpeton.

The A. S. of E. Co-operative Elevator & Grading Company's property at Montevideo, Minn., has been repaired and improved.

A new enclosed ventilated motor has been installed by the Taunton Co-operative Elevator Company of Taunton, Minn.

The elevators of the Rathlisberger Bros. at Iona, Minn., have been bought by J. J. Garry. He is doing considerable remodeling.

Capitalized at \$100,000, the Crown Elevator Company has been incorporated at Minneapolis, Minn. F. P. Wheeler is the incorporator.

The elevator of Bernhard Stern & Son at Milwaukee, Wis., has been leased by the Cargill Grain Company. Its capacity is 500,000 bushels.

An elevator is being built at Ogilvie, Minn., for Henry Neimann on the lots adjoining his feed mill. It will have capacity of 6,000 bushels.

The wholesale and retail grain, feed, flour and farm implement business of the A. J. Bull Company at Rice Lake, Wis., has been bought by Otto Egeberg.

The Union Elevator at Minneapolis, Minn., has been bought by the Brooks Elevator Company. It will be operated under the name of the Union Elevator Company.

The elevator at Arcadia, Wis., formerly conducted by the late F. J. and P. J. Weisenberger has been taken over by W. P. Weisenberger. He will handle grain and seeds.

Storage tanks of 150,000 bushels' capacity are to be built to the plant of the King Midas Mill Company at Hastings, Minn. This will give them a total capacity of 400,000 bushels.

V. E. Kunz has opened the elevator at Douglas, Minn., formerly operated by Louis Hanson & Co., as Kellogg Commission Company. He also runs an 18-inch feed mill in connection with it.

The articles of incorporation of the Imperial Elevator Company at Minneapolis, Minn., have been renewed. Its capital stock is \$750,000. P. L. Howe is president and Spaulding Howe, secretary.

Knauf & Tesch who have been operating for some time at Chilton, Wis., have incorporated as the Knauf & Tesch Company. It will conduct a grain hay, feed, etc., business, capitalized at \$150,000.

The elevator and coal sheds of the Norman County Farmers Elevator Company, Ada, Minn., have been bought by the Ada Milling Company. The milling company will use it for storing grain.

Improvements costing \$250,000 are being made to the Milwaukee, Wis., and Winona, Minn., property of the Froedtert Grain & Malting Company. The Milwaukee plant is being increased by the erection of a 750,000-bushel addition and installation of new machinery.

The elevator of the Eli Salyards Company at Browns Valley, Minn., has been bought by the Cargill Elevator Company. It adjoins its present elevator. It is being enlarged and two dumps, one 10-ton Fairbanks-Morse Scale and two 6-ton Fairbanks-Morse Scales will be installed.

The new additions to the Itasca and Cargill Grain Elevator and the property of the Spencer Kellogg & Sons, linseed crushers at Duluth, Minn., have been

completed in addition to other improvements begun this year. This brings the total capacity of Duluth-Superior to over 40,000,000 bushels.

The Hayes-Lucas Lumber Company opened its new elevator, the former Meriden Farmers Elevator at Owatonna, Minn., under the name of the Clark Elevator. Tom Clark of Britton, S. D., is manager.

The Great Northern Elevator at Marshall, Minn., of the Marshall Elevator & Milling Company has been remodeled. A new office is to be built and new scale and dump installed. V. B. Tubbs is manager.

Plans are being made by the Speltz Grain & Coal Company of Hope, Minn., for a new elevator and feed mill which they will erect this fall. It is being built on the site of the one which burned last spring.

To conduct a grain, flour, feed, hay, etc., business, the Sauk Farm Bureau Exchange has been incorporated at Sauk City, Wis. It has no capital stock. The company will also buy and sell seeds, salt, fertilizer, twine, etc.

One of the houses of the Felton Elevator Company at Felton, Minn., has been sold to the National Elevator Company of Minneapolis, and the other, known as the North Elevator, has been sold to the Monarch Elevator Company.

The Midway Elevator, under the management of the Concrete Elevator Company, and the Calumet Elevator of the Hallet & Carey Company, at Minneapolis, Minn., have been declared regular by the Minneapolis Chamber of Commerce.

The Kurth Malting Company has let the contract for 10 additional concrete storage tanks at its malting plant in Milwaukee, Wis. The tanks and six interstices will provide storage for 360,000 bushels. Its present capacity is 750,000 bushels.

ILLINOIS

O. F. Kleinhans is now with the Utica Elevator Company of Utica, Ill.

New truck scales have been installed by the Clifton Grain Company of Clifton, Ill.

The elevator of the Coatsburg Grain & Livestock Company at Coatsburg, Ill., has been closed.

Forrest Koehn is now the manager of the Fairland Farmers Elevator at Villa Grove, Ill.

A new grain loading spout has been installed in the elevator of Rosenstiel & Co., at Bolton, Ill.

McFadden & Co., whose elevator at Havana, Ill., burned during August, are to rebuild the elevator.

A new addition increasing the capacity by 6,000 bushels has been built to the Brokaw Elevator at Walnut, Ill.

The elevator of the Farmers Elevator Company at Randolph, Ill., has been repaired. An addition has been built to the office.

The grain elevator of Charles McDougal at Cayuga, Ill., has been bought by Clifford and William Murray. They will handle grain.

A new 10-horsepower Fairbanks Morse Ball Bearing Electric Motor has been installed by the Bentley Elevator Company, Bentley, Ill., for its grinder.

New spouting has been installed in the cement elevator of the Sheffield Farmers Grain Company, Sheffield, Ill., of which G. E. Wescott is manager.

The Crawford Elevator at Hindsboro, Ill., has been bought by C. E. Fletcher and C. T. Iungrich who will operate as the Fletcher Grain Company.

The elevator of the Rowell Grain Company of Rowell (Clinton p.o.), Ill., has been repaired and new leg belt installed. It operates an oil station as a sideline.

Ware & Barnstable of Hillsboro, Ill., which conducts a line of feed stores between Hillsboro and Pana, have made plans for the erection of a modern elevator there.

Mr. Deininger has bought the Essen & Barbour Elevator at Peotone, Ill. He has taken his sons, Fred and Herman, into partnership with him and they are conducting the business as Deininger & Sons.

Howard Nash of Champaign, Ill., has recently acquired the McKenna & Dickey Elevators at Mattoon, Ill. He will take possession on or about November 1 and will continue to operate them. He gave a fine section of land near Napoleon, Ohio, in

exchange for these elevators. James M. Maguire, elevator broker, of Chicago, represented both parties in this transaction.

A controlling interest in the C. R. Lewis Grain Company of Jacksonville, Ill., has been bought by Fred W. Ostermeier. It will be known as Ostermeier & Lewis Grain Company with head offices at Jacksonville.

The Claudon Elevator at Gridley, Ill., has been bought by George Gramm and with E. J. Klopfenstein, owner of the East End Elevator, has formed a partnership to be known as Gramm & Klopfenstein. The company will have its offices in the grain office formerly occupied by the Claudon Grain & Coal Company with E. J. Klopfenstein as manager.

IOWA

New coal sheds have been erected for the Farmers Elevator at Grafton, Iowa.

The Hunting Elevator at Everly, Iowa, which burned some time ago, is being rebuilt.

A. J. Rang is manager of the elevator of the Nye & Jenks Grain Company at Lake Mills, Iowa.

The elevator of A. M. Nelson at Manson, Iowa, has been bought by the Davis Bros. & Potter.

An addition is being built to the office of the Rembrandt Elevator Company of Rembrandt, Iowa.

The elevator of the Wm. Grettenberg Grain Company at Coon Rapids, Iowa, has been completely overhauled.

The elevator at Paullina, Iowa, has been leased by A. M. Nelson, who formerly owned an elevator at Manson.

Earl Peterson is manager of the elevator at Owasa, Iowa. He was assistant at the Farmers Elevator at Rembrandt.

A new 45,000-bushel elevator was built at Ventura, Iowa, for Woodford & Wheeler, replacing the one which was torn down.

R. A. Friend has resigned his position as manager of the Farmers Elevator at Lytton, Iowa. W. W. Cooper of Sac City succeeds him.

Godden & McDonald have overhauled their elevator at Burt, Iowa, and installed new dumps, put in new pits and repainted the plant.

The elevator of the Quaker Oats Company at Garden City, Iowa, is to be managed by Martin Eggness who succeeds W. O. Pickett.

Fred Meyers is succeeded as manager of the Clark-Brown Grain Company's elevator at Lena (p.o. Gowrie), Iowa, by Clark S. Elmore.

A motor has been installed in the elevator of the Farmers Co-operative Elevator Society at Ottosen, Iowa, and a feed mill has been installed.

An addition has been built to the elevator of the Farmers Elevator Company, of Chapin, Iowa. It included the installation of a large feed grinder.

Davis Bros. & Potter have its new 125,000-bushel elevator at Pioneer, Iowa, in operation. It has one leg and 26 bins and is equipped with modern machinery.

A new coal house has been built for the Farmers Grain Company of McCallsburg, Iowa, and machinery for unloading installed. He will also install a new motor.

Art Anderson has bought the 12,000-bushel elevator at Rossie, Iowa, and will handle grain, coal, seeds and feed. The building will be covered with corrugated iron.

The elevators at Albion and Marietta, Iowa, of the Farmers Elevator Company, have been sold to Lloyd Reubenbauer of Dillon. The consideration was \$13,000. The new owner moved from Dillon to Albion.

The McColl Elevator, lumber and coal business at Gardiner (r. f. d. Bouton), Iowa, has been bought by Ray U. Tierney. Mr. Tierney has operated a grain business at Bouton for years and will now operate both elevators.

The contract has been let by the Western Flour Mills of Davenport, Iowa, for additional grain elevator capacity of 500,000 bushels at a cost of \$130,000. The addition of the new elevator will give it total capacity of 1,000,000 bushels.

The Tri-State Grain Company has been organized at Shenandoah, Iowa, by John I. Haldeman. He is merchandising grain and seed. Mr. Halde-

man was formerly with the Kellogg-Huff Commission Company of St. Louis. He is doing a strictly brokerage business in Timothy seed.

Adam Hohman has bought the property of the Farmers Elevator Company at Larchwood, Iowa. He was one of the directors of the company which was sold at trustee's sale.

The grain, coal, flour and feed mill of the Nye & Jenks Grain Company at Mason City, Iowa, have been bought by C. H. Hamlin and H. A. Mun-singer. Until last January the business was known as the Independent Grain & Lumber Company of which C. H. Hamlin was secretary. The firm name was originally the Nye-Snyder-Fowler Company and in 1908 the name changed to the Independent Grain & Lumber Company. The new owners will incorporate under this name.

INDIANA

Motors have been installed in the elevator at Deedsville, Ind.

The Farmers Grain & Feed Company of Gas City, Ind., is being dissolved.

The Akin Milling Company of Evansville, Ind., has changed its name to the Stacer Elevator.

A 10,000-bushel corn bin addition is being built to the elevator of Al Konovsky at DeMotte, Ind.

The Reed Bros. of Fort Wayne have bought the Zimmerman & Carpenter Elevator at Decatur, Ind.

A new fireproof warehouse has been built at Manilla, Ind., for the Rush-Shelby Grain Company.

The elevator of the late James H. Love at LeRoy, Ind., has been bought by Jones & Amen of Pendleton.

The Cliff Jordan Elevator at Manson (Frankfort p.o.), Ind., has been bought by Lake & Regan of Regan, Ind.

A preliminary certificate of dissolution has been filed by the Farmers Grain & Feed Company of Marion, Ind.

Capitalized at \$30,000, the Knowles Grain Company has been incorporated at Aylesworth (Veederburg p.o.), Ind.

The United Grain & Flour Company at Swayzee, Ind., has been bought by the Elmwood Grain & Feed Company.

The grain elevator at Elnora, Ind., is being rebuilt. The entire equipment will be electric and there will be considerable increase in capacity.

The Price's Elevator & Grain Company of Griffin, Ind., has built additional storage crib for ear corn of 30,000 bushels' capacity. It has a new 50,000-bushel elevator there.

The elevator of the Lincoln Elevator Company at Lincoln, Ind., which burned is to be rebuilt. It will have a capacity of 15,000 bushels when completed on November 1.

The grain and feed store of Itha Williams at Hagerstown, Ind., has been sold to John Jackson who conducts a mill there. Mr. Jackson will take charge of the property.

Porter Pike has retired from his position as manager of the Farmers Co-operative Company's elevator and supply plant at Centerville, Ind. He is succeeded by John Townsend.

John Henry Stewart is manager of the East End Elevator at Eaton, Ind., which was recently bought by the Urmston Grain Company. The elevator is operated as the Blackford Grain Company.

The grain, feed and coal business at Milroy, Ind., has been bought by Frank Jackson and Maurice Cowan from Will Bosley. Mr. Bosley will go to Hamlet where he is operating a grain elevator.

The McVey-Goodrich Company has been incorporated at Sheridan, Ind., to deal in grain, feed and flour. The capital stock is \$15,000. The incorporators are Harry McVey, Baxter McBane and P. E. Goodrich.

An addition has been built to the Logansport (Ind.) Elevator Company's property which will increase the company's facilities for handling grain and coal. It is 26x46 feet. A concrete coal yard was also built.

The interest of William Leiter in the Erie Elevator at Rochester, Ind., has been traded to his brother and sisters. Fred Leiter will operate. William Leiter has gone to Des Moines where he is with a grain elevator.

WESTERN

The Occident Elevator Company's elevator at Sidney, Mont., has been closed.

E. L. Finch has leased the elevator of the Gary Hay & Grain Company at Jefferson Island, Mont.

A 10-horsepower Fairbanks-Morse Motor has been installed in the Farmers Elevator at McCabe, Mont.

A. R. Holton is agent of the Occident Elevator Company at Wheat Basin, Mont., succeeding Emil Reiner.

The elevator at Eden, Idaho, has been leased by the Cache Valley Grain Company. J. H. Henry will

be manager of the company which will buy and sell all kinds of grain, seeds, and conduct a feed grinder.

A dump has been installed in the elevator of the Ely Harris Grain Company of Outlook, Mont., at Verona.

The elevator of the Rosebud Mercantile Company at Rosebud, Mont., has been sold to the Snell Bros. of Miles City.

General repairs and an overhauling are being given the elevator of the Hugh Baker Grain Company of Burlington, Colo.

A grain elevator is to be built at Springfield, Colo., by J. O. Dugan, grain buyer, as soon as the railroad has been completed.

The Farmers Mill & Elevator Company of Rupert, Idaho, is repairing and painting its building and installing some new machinery.

The capital stock of the Farmers Independent Grain & Produce Company of Waukon, Wash., has been increased from \$10,000 to \$20,000.

The Clallam Grain Company of Port Angeles, Wash., is building a new warehouse to house the products of the Fisher Flouring Mills.

The Fleischmann Company's elevator at Sumner, Wash., is to be improved with two concrete grain storage tanks of 16,000 bushels' capacity.

The Milwaukee Grain & Elevator Company is to build a 50-foot addition to its warehouse at Ralston, Wash. P. T. Tenneson is manager.

The Sokulk Elevator near Oakesdale, Wash., has been bought from the National Bank of Oakesdale by the Kelley Grain Company of Pullman, Wash.

A new head drive has been installed in the elevator of the Equity Co-operative Association of Wolf Point, Mont., and other improvements have been made.

A new grain elevator was recently added by Walter Jansen & Son, of Lincoln, Calif. It has six bins with a cleaner equipment of 100 to 150 sacks an hour.

The Wiggins Elevator, Wiggins, Colo., one of the properties of the Colorado Milling & Elevator Company has been remodeled. It has a capacity of 25,000 bushels.

The elevator and business of the Anderson-Koon Company at Rexburg, Idaho, have been bought by the Weber Company. The company will handle coal, grain, etc.

The Idaho Bean & Elevator Company has opened its plant at Filer, Idaho, with Dudley Driscoll as manager. It is located at the site of the former Alfalfa meal mill.

The interest of M. W. Hunt in the Pasco Grain & Milling Company of Pasco, Wash., has been sold to Engelberg Franz, owner of 50 per cent of the stock of the company.

The contract has been let by the Winter-Truesdell-Diercks Company of Peerless, Mont., for a 25,000-bushel elevator. A Fairbanks 10-ton Scale will be installed together with modern dump.

George Neuswanger of Alliance, Neb., has bought the grain elevator at Upton, Wyo., which was owned by the Union State Bank. He will make improvements and additions as soon as demand warrants.

A reinforced concrete grain elevator costing \$20,000 is to be built at Los Angeles, Calif., for the California Milling Corporation. It will occupy the site of the company's present warehouse which will be wrecked as soon as a new one 110x160 feet and costing \$20,000 can be built elsewhere.

SOUTHERN AND SOUTHWESTERN

A corn elevator is being built at Moore, Texas, by W. E. Sorrells.

The Florida Flour & Grain Company has opened for business in Winter Park, Fla. W. J. Archer is manager.

The Panhandle Grain Company is rebuilding the elevator at Farnsworth, Texas, which was torn down at Supply, Okla.

The new elevator of the Lillie Mill Company at Franklin, Tenn., has been completed. It has a capacity of 175,000 bushels.

The 125,000-bushel elevator of the Middle Tennessee Milling Company at Tullahoma, Tenn., has been completed. It cost \$75,000.

A wholesale business is to be conducted at Goose Creek, Texas, by the Goose Creek Grain Company, Inc. Homer Horton is manager.

A building, to be used as warehouse and sales-rooms for wholesale grain and feeds, has been built at Pineville, Ky., by W. H. Cole.

The capital stock of the Seaport Grain Company of Houston, Texas, has been increased from \$10,000 to \$20,000. The company contemplates making several improvements on its property at Houston.

G. P. Rose & Co., Nashville, Tenn., who have been doing an extensive business in grain, hay and seed, have been reorganized. The elevator

property has been sold together with good will to G. P. Rose, Jr., a son of Mr. Rose who for 20 years was associated with his father.

The Liskee Elevator at Booker, Texas, has been bought by C. R. Holman who will operate the elevator as the Booker Grain Company.

The property of the Henderson Elevator Company of Henderson, Ky., which was destroyed by a tornado has been replaced by a 10,000-bushel elevator.

Saint & Co., Inc., Houston, Texas, has built a three-story addition to its grain elevator. It is on property recently acquired under terms of a 99-year lease.

The interest of W. E. Jones in Gay & Jones at Mt. Sterling, Ky., has been bought by his partner, James E. Gay. He will operate as the Gay Feed & Grain Company.

The Farmers Grain, Lumber & Coal Company of Ashley (Ingersoll p. o.), Okla., plans to ironclad its elevator and make other improvements. Lester McKee is manager.

The building material of the Westwego Elevator at New Orleans, La., which is to be wrecked, is offered for sale. There are two buildings with capacity of 1,500,000 bushels.

The Wichita Elevator Company, the Grandfield Elevator Company and the Farmers Co-operative Elevator Company of Grandfield, Okla., have ordered graders and smut dusting machines for seed wheat.

The 14,000-bushel elevator of the Farmers Elevator Company at Ringwood, Okla., has been leased by the Blackwell Mill & Elevator Company. A truck dump is to be installed. F. C. Dymock is manager.

The new elevator of the Southwest Terminal Elevator Company of Enid, Okla., has been completed and commenced to handle grain on September 1. The Jones-Hettelsater Construction Company had the contract.

W. H. Douglas of Perryton, Texas, will construct three additional overhead bins in his 10,000-bushel elevator and will erect an ironclad warehouse to house his sidelines. It is run by two Fairbanks-Morse Electric Motors of 2 and 7½ horsepower.

An addition to the present 1,750,000-bushel elevator of the Katy Elevator at Fort Worth, Texas, is to be built which will double the capacity of the elevator. It will consist of 68 reinforced concrete bins and 48 interstice bins. The headhouse will be in the north end of the new unit in which will be located 18 bins over and under a machinery floor on which will be located wheat washing and cleaning machinery. The new headhouse is to be connected by means of belt conveyors to the present headhouse so that all bins in the new unit will be operated in connection with the present headhouse machinery in the same manner as the storage bins in the present plant. The belt conveyors and elevators will have a handling capacity of 10,000 to 12,000 bushels per hour each. The additional unit will cost \$600,000 and will be ready within four months.

MISSOURI, KANSAS AND NEBRASKA

E. O. Doak is agent for the J. J. Mullaney Elevator Company at Randolph, Neb.

The elevator of A. F. Grothe at Berwick, Kan., has been sold to Jacob H. Strahn.

An ironclad warehouse is to be built at Douglass, Kan., for L. B. Brandt, grain dealer.

Frank McCashland has resigned as manager of the Farmers Elevator at Lebanon, Neb.

A grain cleaner is being installed in the Haigler Equity Exchange Elevator, Haigler, Neb.

A smut treating machine is being installed by the Farmers Equity Elevator of Holdredge, Neb.

John Purnell has resigned as manager of the Conley-Ross Elevator Company at Madrid, Neb.

The Z. B. Elevator Company's new 11,000-bushel elevator at Mayetta, Kan., has been completed.

The Farmers Elevator Company of Garden Plain, Kan., is considering the installation of an air truck lift.

The Neuswanger Grain Company is to build a modern brick structure costing \$15,000 at Alliance, Neb.

The Farmers Grain & Supply Company of Hugoton, Kan., has installed a 15-ton Fairbanks Truck Scale.

G. E. Vining succeeds the late Walter Hogue as manager of the Farmers Elevator Company of Hubbell, Neb.

The Viola Grain Company, of which W. H. Dobbin is manager, has installed a smut treating machine at Viola, Kan.

Improvements are being made at a cost of \$10,500 to the McDaniels Elevator at Lamar, Mo. U. Gray is manager.

The Trans-Mississippi Grain Company of which C. D. Sturtevant is president, has bought the grain elevator of the former Merriam & Millard Company

at Omaha, Neb. The consideration for the elevator, which has a capacity of 800,000 bushels, was \$40,000.

J. J. Gish has resigned as manager of the Sel-donridge Grain Company at Farnam, Neb., and is succeeded by Neil Garven.

L. A. Adler of Goddard, Kan., has installed electrically operated machine for treating smutty seed wheat with copper carbonate.

The Anthony Farmers Co-operative Elevator at Anthony, Kan., has installed a combination cleaning and smut treating machine.

The name of the Guy C. Clary firm at Clearmont, Mo., has been changed to the Clearmont Elevator Company. Guy C. Clary is manager.

A line of copper carbonate wheat treating machines has been installed by the Farmers Grain & Supply Company of Great Bend, Kan.

The elevator at Houstonia, Mo., which has been closed for several months has been bought by I. C. Dogan and W. C. Westbrook. They are operating it now.

The elevator of the Barstow Grain Company at Ord, Neb., has been bought by the Blessing Bros. who will conduct it as an adjunct of their stock business.

The J. J. Mulaney Elevator at Dixon, Neb., has been opened for business. The F. J. Hopkins Elevator there has been rented. J. J. O'Connell is local manager.

G. W. Bunds & Son, J. P. Coates Grain Company and the Farmers Union Grain & Livestock Association have taken over the Caywood plant at Clifton, Kan.

The old Jamesport Elevator of the old Commercial Bank, Jamesport, Mo., has been bought by the M. F. A. which will operate as soon as organization plans have been perfected.

The elevator of the Geneseo Company at Geneseo, Kan., which has been standing idle since that company stopped operations, has been bought by the Farmers Co-operative Company.

The elevator of the Farmers Union Co-operative Company at Smolan, Kan., has been bought by Ben Johnson who will operate as the Ben Johnson Grain Company. August Swedenburg is manager.

The elevator of the Chicago & Alton Railroad at Kansas City, Mo., is to be enlarged. The elevator was built last year and its plans so arranged that an addition could be erected at minor additional expense.

The Grange Elevator Company's holding, including elevator, office building, coal sheds, etc., has been bought by S. D. Smith & Sons at Shelton, Neb. They will continue it under the name of the S. E. Smith & Sons Grain Company.

The Mississippi Valley Elevator at St. Louis, Mo., of 1,500,000 bushels' capacity has been bought by the Ralston Purina Mills of St. Louis. It will be operated as a public house under the name of the Checker Board Valley "A." It will bring the Purina storage capacity in St. Louis to approximately 3,000,000 bushels.

OHIO AND MICHIGAN

New scales have been installed in the Farmers Elevator Company of McClure, Ohio.

New cleaning machinery has been installed by the Gilliland Grain Company of Haviland, Ohio.

A sheller and combination cleaner has been installed by S. M. Loxley & Son of Bradford, Ohio.

A coal unloader has been bought and installed by the Okolona Grain Company of Okolona, Ohio.

A Eureka Corn Cracker has been installed by the Arlington Elevator & Supply Company of Arlington, Ohio.

The Farmers Co-operative Company of Forest, Ohio, has installed a new dump and scale at the elevator.

Wallace & Morley, operators of a chain of elevators, have bought the Farmers Co-operative Elevator at Akron, Mich.

Considerable repair work has been done to the old C. H. & D. Elevator at Toledo, Ohio, now leased by the Rosenbaum Bros.

Remodeling and enlarging has been done to the grain and bean elevator of the Christian Breisch Company at Lansing, Mich.

A Western Sheller has been installed by the Union Iron Works in the elevator of the Brookville Farmers Grain Company of Brookville, Ohio.

L. H. Moon is manager of the elevator at Flushing, near Lansing, Mich. He was manager of the J. K. Mullen Elevator located at American Falls, Idaho.

A. P. Eier is now manager of the Farmers Elevator Company at Nevada, Ohio. He was formerly manager of the Vanlue Grain & Supply Company of Vanlue, Ohio.

The elevators of J. S. Knapp & Son at St. Mary's, Ohio, have been sold to a group of Montezuma men

who will operate the St. Mary's Grain Company. Frank Klosterman, Ben Wilker and John Homan are interested.

Louis Coal has bought an interest in the George F. Dimond Company of St. Johns, Mich. He was for 11 years in the grain business at Salina, Mich.

Henry Ginter is succeeded as manager of the elevator of the Michigan Bean Company at Vestaburg, Mich., by D. Manley. Mr. Ginter is at Midland.

The Cline & Martin Grain Elevator, now the property of the Baltimore & Ohio Railroad, at Mansfield, Ohio, has been torn down. The material will be salvaged.

The business of the Harry C. Sair Company, Lansing, Mich., dealers in grain, feeds and seeds, has been discontinued. Edward A. Sump was appointed receiver some time ago.

The Fostoria Storage & Transfer Elevator Company of Fostoria, Ohio, has placed an order for another Randolph Direct Heat Grain Drier to double its present drying capacity.

A 35,000-bushel grain storage has been completed for the Portland, Mich., plant of the Valley City Milling Company of Grand Rapids, Mich. It consists of three reinforced concrete tanks.

Ray Thomas has resigned as manager of the Elevator & Produce Company of Bad Axe, Mich., the Huron Valley Mills, Bad Axe, Mich., and also the grain and bean elevators at Tyre, and Palms, Mich.

The Standard Elevator & Supply Company of Chillicothe, Ohio, is installing a 300-bushel Randolph Direct Heat Grain Drier over its engine room. Mr. Herrnstein reports that the drier will be installed and ready for the movement of the coming corn crop.

The Reliance Construction Company has the contract for a new 30,000-bushel frame ironclad elevator for the West Jefferson Elevator Company of West Jefferson, Ohio. It will have 10 bins and be equipped with two legs, two receiving sinks, four motors, four chain feeders, Monitor Cleaner, automatic scale, feed mill, manlift, truck dump, and sheller.

The Central Elevator on the Clover Leaf Railroad in Toledo, Ohio, was sold to Edgar Thierwechter who negotiated for J. F. Zahm & Co., and C. A. King & Co. It was the first iron elevator to be built—erected in 1894—in this country and has a capacity of 200,000 bushels. It brought \$10,000. The elevator will be run and owned jointly by these two firms after repairs are made.

EASTERN

H. C. Shaw is now associated with the Newman Bros. Grain Company of Rochester, N. Y., which bought the Mystic Milling Company.

To deal in all kinds of grain, etc., the Union Elevator Company has been incorporated at Wilmington, Del. The firm is capitalized at \$500,000.

Christian M. Horst, Clarence E. Miller and Leo H. Miller have incorporated at Hagerstown, Md., as the Linwood Elevator Company. Its capital stock is \$50,000.

The grain and lumber business of George W. Case at New Hartford, Conn., has been sold by him to M. D. Leonard of Boston.

The Seneca Elevator Company of Buffalo, N. Y., is installing a 1,000-bushel per hour Randolph Direct Heat Grain Drier in its 1,000,000-bushel house at Buffalo to take care of the coming corn crop.

THE DAKOTAS

The Farmers Elevator at Gayville, S. D., has been bought by Lars Olson.

A new cleaner has been installed by the Ryder Grain Company of Ryder, N. D.

The Farmers Union Grain Company's elevator at Plana, S. D., has been repaired.

A dump is being installed by the Niagara Elevator Company of Niagara, N. D.

J. C. Goll of Danzig has taken over the Peoples Elevator Company at Ashley, N. D.

The building of the Farmers Elevator Company at Milton, N. D., is being repaired.

The Nelson Grain Company is building a 60,000-bushel elevator at Michigan, N. D.

A new cleaner has been installed by the Farmers Elevator Company of White Rock, S. D.

Two electric motors have been installed by the Farmers Elevator Company of Jefferson, S. D.

The Philip Milling Company of Philip, S. D., has erected a 10,000-bushel addition to its elevator.

The Farmers Elevator at Mohall, N. D., has been bought by the Wheat Growers Warehouse Company of that place.

The Akaska Equity Exchange is repairing both its elevators at Akaska, S. D. Dumps and Fairbanks Scales have been installed; both elevators were repainted, and head drives, with Fairbanks

Enclosed Motors, new legs and running equipment installed.

Business is being conducted at Minnewaukon, N. D., by the Minnewaukon Fuel & Grain Company.

General repairs have been made to the plant of the Esmond Equity Elevator Company of Esmond, N. D.

The Barlow Grain & Stock Exchange's new 50,000-bushel elevator at Barlow, N. D., has been completed.

A large Fairbanks Motor has been installed in the elevator of the Farmers Elevator Company of Berthold, N. D.

A Strong-Scott Dump has been installed and other repairs made to the elevator of W. C. Johnson at Oldham, S. D.

A manlift has been installed and other repairs made to the property of the Farmers Elevator Company of Towner, N. D.

An enclosed ball-bearing motor and head drive have been installed by the Astoria Farmers Elevator of Astoria, S. D.

Leo P. Trudeau is successor of C. B. Homme as manager of the Equity Elevator & Trading Company at Brocket, N. D.

Changes and repairs are being made to the elevator of the Winter-Truesdell-Diercks Elevator Company at Wildrose, N. D.

The Farmers Co-operative Grain Company of Havana, N. D., has installed a truck dump and Fairbanks 10-ton Scale.

The elevators at Westhope, Leeds and Derrick, N. D., are to be taken over by the North Dakota Wheat Growers Warehouse Company.

The Bounty Siding Grain Elevator near Crosby, N. D., has been sold by Myles Henderson to W. E. Chapman. Alfred Ness will be manager.

The Farmers Elevator Company of Benedict, N. D., has installed new legs, new pits and new belts and made general repairs on its elevator.

J. M. Wells has equipped his elevator at St. John, N. D., with Strong-Scott Dumps as has the International Elevator Company at the same place.

A dump, as well as new boots, pits and other repairs, has been installed at the property of the Emerado Farmers Elevator Company of Emerado, N. D.

H. H. Nand, B. E. Thorpe and William Peterson have incorporated at Scranton, N. D., as the Thorpe & Peterson Elevator Company. Its capital stock is \$10,000.

New coal sheds, a flour house and office, and new Strong-Scott Dump have been installed by the Farmers Co-operative Elevator Company of New Effington, S. D.

The Farmers Co-operative Grain Company of Minot, N. D., whose elevator burned will rebuild it. It will have capacity of 35,000 bushels when it is completed.

The elevator of the Van Wickle Grain & Lumber Company at Oelrichs, S. D., has been sold to the Richards Grain & Lumber Company. Ted Richards is manager.

Improvements have been made to the Farmers Elevator at Hampden, N. D. It includes a spout, Strong-Scott Manlift, modern dump and also a Fairbanks Scale.

A 50,000-bushel annex has been built to the elevator of the J. C. Miller Elevator Company at Mortimer (Galesburg p. o.), N. D. Charles Tenneson is manager.

Extensive repairs have been made to the elevator of the Sanborn Grain Company of Sanborn, N. D., including new pit, installation of individual motors and a new coat of paint.

A half interest in the elevator at Harvey, N. D., formerly owned by the Schulz Grain Company. Mr. Faul will be engaged in the business with Mr. Raugust as Raugust & Faul.

The Lowry Farmers Exchange Elevator, Lowry, S. D., is under the management of R. J. Schafer. He has been in charge of an elevator at Chelsea, S. D., for a number of years.

A new coal shed has been built at Litchville, N. D., for the Litchville Fuel & Grain Company. An unloading conveyor will be operated electrically using a three-horsepower motor.

Two new drives with 7½-horsepower Fairbanks Morse EJH Motors and motors for cleaner and dockage tester have been installed by the Farmers Elevator Company of Rawson, N. D.

T. W. Crissman has retired as buyer for the Osborn-McMillan Elevator Company at Fessenden, N. D., a position which he held for 31 years and is succeeded by C. R. Bietz of Berwick.

New dumps have been installed in the elevators of the Farmers Elevator Company, Armourdale, N. D., Equity Elevator & Trading Company of Brocket, N. D., Farmers Co-operative Elevator Company, Cando, N. D., Farmers Grain Elevator Company, Thorne, N. D., I. L. Berge Grain Company,

Golden Valley, N. D., Coulee Farmers Elevator Company, Coulee, N. D., the Levant Elevator Company, Levant (Manvel p. o.), N. D.

Articles of incorporation have been filed by the Barney Elevator Company of Barney, N. D., capitalized at \$25,000. H. B. Springer, H. E. Jung and Barney Becker are interested in the new firm.

Extensive repairs have been made to the elevator of the Sanborn Grain Company of Sanborn, N. D. It includes a new pit, installation of individual motors for the machinery and a new coat of paint.

The Page Co-operative Grain Company and the old Page Farmers Elevator Company of Page, N. D., have been consolidated and will operate as the Page Elevator Company. Giles Appel is manager.

A three-story addition is being built to the present building of the Interstate Seed & Grain Company of Fargo, N. D. It will be used for storage and the old building is to be equipped with new cleaning machinery.

The Empire Elevator at Lemmon, S. D., has been bought by E. J. Ziltz. He has for the past 13 years, been engaged by the Western Lumber & Grain Company as grain buyer and manager of

their elevator. The Empire Elevator will be overhauled and equipped with modern cleaning machinery for grain and seed. Feed mills will also be installed.

The old Farmers Elevator at White Earth, N. D., has been bought by A. Grinder, formerly manager of the Rising Farmers Co-operative Elevator Company at Rising Siding. Mr. Grinder is succeeded at the latter place by Mr. Swanson.

CANADA

The Dominion Elevator Company of North Portal, Sask., will rebuild its elevator which burned. It will have a capacity of 40,000 bushels.

C. M. Hall is manager of the Alberta Wheat Pool Elevators of Vancouver, B. C. Mr. Hall has for 11 years been with the Alberta Pacific Grain Company.

All of the country elevators of the Robin Hood Mills, Ltd., have been sold to the National Elevator Company. The Robin Hood company will devote its time to milling. Nine elevators in Alberta each with a capacity of 35,000 bushels are transferred in the deal.

of a small loss on August 5. The motor was enclosed, thereby probably saving a severe loss, for the damage was confined to the enclosure.

Plymouth, Wis.—The warehouse of the J. H. Timm Company, dealers in flour, feed and agricultural implements, was destroyed by fire with a loss of \$30,000.

Manley, Neb.—The grain elevator of Ed Kelley & Co., was burned. It was a total loss having 600 bushels corn and 200 bushels wheat stored at the time of the fire.

Everly, Iowa.—The West Elevator of the Hunting Company was destroyed by fire together with its contents on August 23 with a loss of \$12,000. The elevator is to be rebuilt.

Kenton, Ohio.—The Brick Mill & Grain Company was destroyed by fire the evening of September 4 with loss of \$30,000. The fire is believed to have been started by lightning.

Carrollton, Mo.—Fire damaged the elevator of the Farmers Grain & Supply Company. The fire was caused by lightning. The loss amounted to \$20,000, covered by insurance.

Portland, Maine.—Fire destroyed the property of the New England Grain Company at this place on August 11. It caused a damage to the building and other waterfront property of \$100,000.

Corsicana, Texas.—Fire destroyed the warehouse of the Corsicana Grain & Feed Company together with a quantity of hay and grain. The loss was \$6,000; partly covered by insurance.

Allentown, Pa.—Fire on August 30 destroyed with a loss of \$100,000, the grain elevator of the Mauser Milling Company and the lumber storage shed and garage of the Ritter & Smith Company.

Palemon (Norborne p. o.), Mo.—Fire on August 13, caused by lightning, destroyed the elevator of the Farmers Co-operative Company with 10,000 bushels of wheat. The loss is covered by insurance.

Seaford, Ind.—Fire of unknown origin destroyed the elevator and 25,000 bushels of grain of the Seaford Grain Company on August 29. Charles Martin was the owner. He will rebuild the elevator.

Evans Lane (Mail Terre Haute), Ind.—The elevator of the Cottrell Bros. was destroyed by fire on August 25, with a \$15,000 loss. The firm consists of Bert and Dan Cottrell and operates a chain of elevators.

Blenheim, Ont.—Fire on August 21 destroyed the plant of the Rutherford Milling Company with a loss of \$140,000, which is partly covered by insurance. The entire plant with the exception of office, consisting of grain elevator, bean elevator, warehouse and five-story mill was destroyed.

FIRES—CASUALTIES

Darwin, Minn.—Fire destroyed the elevator of the Farmers Elevator Company.

Blackstone, Ill.—The Farmers Grain Elevator at this place was destroyed by fire.

North Portal, Sask.—Fire destroyed the Dominion Elevator here with \$10,000 losses.

Nebraska City, Neb.—Two fires damaged the elevator of the Duff Grain Company.

Emmett, Kan.—The elevator of Thomas M. White was destroyed by fire on August 12.

Breda, Iowa.—The P. L. Roth Elevator here was burned with 4,000 bushels oats and barley.

Logansport, Ind.—The Louis Kasche feed store was damaged by fire with a loss of \$6,500.

Gibbs Spur, near Holton (Chillicothe p. o.), Ill.—Fire destroyed the elevator of E. M. Crank.

Brentford, S. D.—A total loss was sustained by Barker's Independent Elevator on August 31.

Havana, Ill.—The McFadden Grain Elevator here was considerably damaged by fire.

Preble, Ind.—The elevator of the Preble Equity Exchange was slightly damaged by fire recently.

Swayzee, Ind.—The United Grain & Supply Company's property was a total loss on August 8 by fire.

Vernon, Texas.—Fire with a loss of \$3,000 damaged the warehouse of the Martin-Lane Feed Company.

Arthur, Iowa.—Lightning struck and damaged slightly the plant of the Farmers Elevator Company.

Leduc, Alta.—Fire destroyed the grain elevator of the Quaker Oats Company. The plant had a capacity of 60,000 bushels.

Payne (Brocton p. o.), Ill.—The elevator of the Brocton Elevator Company was damaged slightly by fire.

Butler, Mo.—Fire destroyed the Butler Elevator of Byron & McDaniels. The insurance carried was \$3,000.

Middletown, Ind.—Lightning struck the plant of J. M. Walker & Son on August 13 causing a small damage.

Kendall, N. Y.—The East Elevator of the Kendall Produce Company was totally destroyed by fire on August 24.

Banner, Okla.—Fire nearly destroyed the Yukon Mill & Grain Company's elevator. Lightning caused the fire.

Inwood, Ind.—On August 29 lightning struck the elevator of J. C. Erwin and destroyed a cleaner in the cupola.

Wood Lake, Neb.—The Arch Williams granary and office adjoining it were destroyed by fire with a loss of about \$5,000.

Denver, Colo.—A fire starting in a garage did small damage to the plant of the Summit Grain Company on August 24.

Galva, Ill.—On August 10 lightning caused a small damage to the elevator of the Galva Co-operative Grain & Supply Company.

Cooksville, Ill.—The elevator of M. B. Hyde was destroyed by fire on August 26. The elevator was of 40,000 bushels capacity.

Dillon, Mont.—Fire destroyed the elevator and mill of the Beaverhead Mill & Elevator Company. A total of 10,000 bushels wheat and 1,000 barrels

flour was destroyed. The loss amounted to \$75,000. The property will not be rebuilt this year.

Freeland, Mich.—A locomotive spark on a shingle roof caused a small damage to the elevator of the Cass City Grain Company on August 24.

Swanson, Sask.—With a loss of \$40,000, the elevator of the Pioneer Elevator Company was destroyed. It had a capacity of 55,000 bushels.

Barnard, Kan.—Fire which originated at the drive shaft was the cause of a small loss to the elevator of the Morrison Grain Company on August 7.

Deansboro, N. Y.—A small loss, probably caused by spontaneous combustion, was sustained by the Deansboro Feed & Lumber Company on July 27.

Inwood, Ind.—Stock in the elevator of Kraus & Apfelbaum was slightly damaged by fire which resulted when lightning struck the building on August 30.

Versailles, Ohio.—An electric motor burnout in the elevator of Frankham & Gephart was the cause

OBITUARY

ADAM.—Calvin H. Adam of Schlegel Adam & Co., dealers in grain feed and flour at Fleetwood, Pa., died on August 7 aged 57 years.

BARRY.—M. O. Barry died suddenly at Grand Forks, N. D. He had been in the elevator business at Henning, Minn., for years. He was 65 years old.

COOVER.—Frank L. Coover died on August 23 aged 61 years. He was in the grain and flour business at Mechanicsburg, Pa.

COURTNEY.—W. P. Courtney died at his home following an automobile accident. He was a feed and seed dealer at Fergus Falls, Minn.

CROWE.—Thomas Crowe died, aged 71 years, at his home in Florence (Freeport p. o.), Ill. He had managed a grain elevator there for 20 years. His widow and six children survive him.

FRITTON.—Frank J. Fritton for 25 years with the John T. Darrison Feed Company, Lockport, N. Y., died on August 4 at his home there.

GREVE.—Henry Greve died from heart trouble at his home in St. Louis, Mo. He was president of the John Wahl Commission Company and had been in the grain business since 1881. He was made president of the company in 1910.

HAGERMAN.—Frank Hagerman for years attorney for the Kansas City Board of Trade, died on August 27 at Kansas City, Mo.

HANLIN.—Stewart J. Hanlin died on August 8 at Richmond, Ohio, aged 76 years. He had for years been in the grain and flour business at Midway, Pa.

HARTING.—George Harting died on August 6 at his home in Elwood, Ind., aged 77 years. He was for about 40 years operator of a grain elevator at Elwood. His widow and one son survive him.

HOPKINS.—Alfred Hopkins died aged 60 years at Madison, Wis., where he had been in the grain

business for years. Heart trouble was the cause of his death.

HARVIE.—Robert Harvie died on August 5. He was a member of Brodie & Harvie, members of the Montreal Board of Trade.

JONES.—J. B. Jones died at his home in Hereford, Texas, aged 62 years. He was senior member in the grain and feed company of the Jones-McLean Company. He moved to Texas 12 years ago from Emporia, Kan.

KIRK.—Edgar A. Kirk died aged 52 years at his home in Minneapolis. He had during the past year been associated with the Tenney Company of Duluth, but preceding that for 28 years has been secretary of the McCaull Webster Elevator Company of Minneapolis.

MANEY.—John Maney died on August 15 at Enid, Okla., aged 56 years. He was secretary and general manager of the Canadian Mill & Elevator Company, secretary of the Enid Milling Company, vice-president of the Maney Milling Company, and secretary of the Southwest Terminal Elevator Company of Enid, Okla. His widow survives him.

MEARS.—Clarence T. Mears died suddenly after an attack of cerebral hemorrhage on September 1. He was president of the Itasca Elevator Company of Duluth and director of the Duluth Board of Trade. He was 54 years old and had been at Duluth for 25 years.

MOORE.—William B. Moore died on August 22 at his home in Floral Park, L. I., at the age of 65 years. He for years handled hay in New York City.

PARSONS.—Roy V. Parsons, assistant secretary of the Toledo Produce Exchange, was killed in an automobile accident on August 14.

RAY.—Charles Ray, president of the Milwaukee Chamber of Commerce in 1878, died at Pasadena,

Calif., on August 12 where he had made his home since 1925. He entered the grain business in 1866.

RUMP.—August Rump died recently aged 85 years. He was flour inspector on the St. Louis Merchants Exchange for more than 50 years.

SHAW.—G. C. Shaw died aged 64 years at Frankfort, Ky., on August 12. He was a seed and feed dealer there.

SOMERS.—G. T. Somers died at his home in Toronto, on August 21. He was founder of the Canada Grain Company, Ltd., of Toronto, Ont.

STAUFFER.—S. K. Stauffer died recently at Columbus, Kan. He was president of the Stauffer-Camack Grain Company of Columbus, Kan.

TOMPKINS.—Gilbert Tompkins died at his home in New York City aged 77 years. He had been in the grain business for years and had been active on the New York Produce Exchange.

TURPIN.—W. R. Turpin died on August 11, aged 54 years, at Turpin (Decatur p. o.), Ill. He was for

20 years or more owner of a grain elevator there. His widow and two sons survive him.

TAYLOR.—F. G. Taylor died suddenly at Philadelphia, Pa. He was president of the Ely Seed Company.

THOMPSON.—James Thompson, manager for 16 years of the Farmers Elevator Company at Lowder, Ill., died not long ago.

TRIPP.—H. H. Tripp, president of the Farmers Grain Company of Assumption, Ill., died at the age of 65 years.

WALKER.—Ansel G. Walker, a grain dealer of Jackson, Mich., died aged 87 years. He started in the grain business many years ago with Richard Waldron and was active in this work until 10 years ago.

ZORN.—Garnett S. Zorn died from apoplexy aged 50 years. He was president of S. Zorn & Co., grain dealers of Louisville, Ky. His father founded this business years ago and since his death Garnett S. Zorn has been at the head.

& Stock Co-operative Company of Wyandot, Ill. It has a cement elevator and a large two-story building which is used for office and as a storage plant for machinery.

A modern feed mill is to be installed by the Consolidated Grain & Lumber Company of Gladbrook, Iowa, in an addition being built to its elevator at Traer.

The Sunshine Feed Company of Lakeland, Fla., has bought the Farmers Supply Company. A complete line of feeds, seeds and fertilizers will be handled.

A wholesale and retail feed, flour and grain house has been opened at Orlando, Fla., by W. M. Sawyer. He will operate as the Pine Castle Feed Company.

C. S. Collier and R. L. Jordan have bought the property of the Edinburg Feed & Seed Company of Edinburg, Texas. A new building is being planned for the company.

A one-story galvanized iron building to be used for flour, feed and seed, is to be built at Anadarko, Okla., for Dan Vollmer. It is to be near the Vollmer Elevator and storage house.

Improvements have been made to the electric feed grinder of the John F. Shields Grain Company of Chetopa, Kan. It will manufacture different kinds of chicken and dairy feeds.

The Penick & Ford plant at Cedar Rapids, Iowa, is being improved with an addition to the feed grinding house, and by a new warehouse. The total cost of the project will be \$10,000.

The Wright-Muhlhan Company of New York City has dissolved the partnership. John Muhlhan, one of the firm, has gone with the Gordon-Dawson Company of Boston, Mass., as vice-president.

A feed mill is to be installed in the elevator of the St. Anthony & Dakota Elevator Company of Minneapolis at Arthur, N. D., using a 24-inch Reliance Attrition Mill operated by two 20-horsepower motors.

A wholesale feed, seed, fertilizer, etc., business is to be conducted at Fond du Lac, Wis., by R. H. Cameron of Newberry, Mich., who has leased a part of the Anderson Warehouse there for that purpose.

HAY, STRAW AND FEED

The Everett Feed Mills of Everett, Wash., have been dissolved.

A feed store has been opened at Two Harbors, Minn., by Albert Lindgren.

The L. & G. Feed Company of Galesburg, Ill., is interested in a new store there.

An addition 30x32 feet is being built to the feed store of John West at Chetek, Wis.

The Farmers Elevator at Sioux Center, Iowa, has been equipped with a feed grinder.

A feed mill has been added by the Froning Grain & Coal Company of Allison, Iowa.

The plant of the Ambler Feed & Fuel Company of Lamanda Park, Calif., is being remodeled.

A hammer mill has been installed by the Plano Co-operative Grain Company of Plano, Ill.

A new feed mill has been added by the Selmser Fuel & Grain Company of Watertown, S. D.

A new attrition mill has been installed by the Erickson Elevator Company of Canby, Minn.

A feed store has been opened at 5050 W. Washington Street, Indianapolis, Ind., by W. W. Parker.

A feed store has been opened at Waco, Texas, by J. S. Hawkins as the Hawkins Cash Feed Store.

Clarence McQuinn has been put in charge of the National Feed Company of Yellow Springs, Ohio.

The Equity Union Exchange Elevator of Monroeville, Ind., has been equipped with a feed grinder.

A new office has been built at Akley, Minn., by E. R. Welker who deals in feed, lumber and coal.

A new feed grinder has been installed in the elevator of the Farmers Union at Weeping Water, Neb.

An attrition mill has been installed by the Farmers Grain & Mercantile Company of Round Lake, Minn.

A sheller and large motor driven feed grinder have been installed by the Osborn Feed Company of Van Wert, Ohio.

A feed grinding department has been added to the property of the Farmers Produce Company of Belle Plaine, Minn.

Transmission and other equipment for a feed grinder has been installed by the Payne Equity Exchange, of Payne, Ohio.

A feed mill is being built at Volga, Iowa, for Ted Leete and Forest Humbert. It is operated by two large electric motors.

A 10-horsepower motor has been installed in the warehouse of the Bentley Elevator Company of Bentley, Ill., to grind feed.

A one-story warehouse has been built at Highland Park (Station Los Angeles), Calif., for the York Feed & Fuel Company.

A complete feed grinding equipment has been installed in the elevator of the Farmers Elevator Company at Coopersville, Mich.

An addition has been built to the elevator of the Farmers Elevator Company of Chapin, Iowa, and a feed mill has been installed.

The Farmers Elevator Company of Clear Lake, Iowa, has installed a new feed grinder at a cost of \$3,000. G. H. Jackman is manager.

A motor driven attrition mill and corn cracker and elevators have been bought by the Trotwood Farmers Exchange of Trotwood, Ohio.

Articles of incorporation have been filed by the S. C. Johnston & Co., Happy Feed Stores, at Birmingham, Ala. Its capital stock is \$10,000. S. C.

Johnston is president; W. A. Johnston, vice-president and general manager; A. M. Johnston, secretary and treasurer.

The interest of Charles Kinnard in the Pendleton Feed & Fuel Company at Pendleton, Ind., has been sold to Dr. Paul Miller of St. Petersburg, Fla.

The feed business of the Fouts Bros. of Camden, Ind., is being taken over by F. S. Snoeberger. The Fouts Company will continue its seed business.

A new business has been opened at Jasper, Ala., by the Scott & Robins Feed & Grocery Company. C. Morgan Scott and Custis L. Robins are interested.

A 30-inch attrition mill with two 40-horsepower motors has been installed by the Farmers Grain

FIELD SEEDS

(Continued from Page 174)

to be a short yield. Despite the fact that the supply will be reduced by the small harvest, the crop is moving slowly. The demand is not as large as it was expected to be and there has been no important rally in prices, according to the local seedsmen.

The Timothy crop is reported to be large, according to Milwaukee seed dealers. Iowa is said to have fairly abundant yields. However, the market has been very weak having gone down over the last few weeks about \$2.50 per cwt. Local traders in seeds blame this not so much on the large yields as on the fact that Timothy is getting in worse repute every day. Many farmers are turning to Alsike, to Alfalfa, to sweet Clover and to other similar lines, but no one is turning to Timothy.

The Wisconsin College of Agriculture is steadily campaigning against Timothy, reporting from experiments that it is almost worthless for milk cows, whereas other Clovers fill this need admirably. Hence there is a steadily decreasing acreage for Timothy in Wisconsin and this is showing clearly in the backward market for this seed in Milwaukee.

Adams County, Wisconsin, has hit upon a scheme to boost the cultivation of Alfalfa in that county—that of offering larger prizes for the best Alfalfa at the county fair. The banks at Adams and the County Fair Association have collected a fund of \$150. The prizes are distributed for the best cuttings of first and second crop Alfalfa. To still further stimulate interest, prizes were given for first, second and third best sheaves of grasses and 20 smaller prizes were given to spread out the prize money still more.

Burnett County has just completed its annual inspection of Alfalfa fields in which 340 farmers took part. County Agent E. H. Thompson of Grantsburg showed the farmers just what Alfalfa would do on light sandy soil. Grimm seed and marl applications were used and in three years an excellent stand was produced, Mr. Thompson stated.

Various farmers of southern Wisconsin are reporting excellent yields of oats and barley so that the seed supply for next year can be replenished from the finest grain. Oats in Rock County and near Elkhorn and in several other sections of the southern belt of Wisconsin, have yielded in many cases 60 to 65 bushels an acre, while, only the

poorer fields have averaged down to 40 bushels an acre.

The same sections reported many cases of barley yielding 45 to 50 bushels an acre of fine quality grain, which will make the choicest seed. Rye harvested went to 36 bushels an acre in some cases.

NEW YORK SEED TRADE IMPROVES AFTER SLOW START

By C. K. TRAFTON

During the month under review climatic conditions were generally unfavorable in field and grass seeds. Over wide areas tributary to this market there was frequently an abundant rainfall which curtailed activities on the farms. At other times the weather was warm and sunny, creating a belief that the rains had finally ceased and arousing hopes that in spite of all the drawbacks and delays the new season would have a fairly good start after all. At this writing the general attitude of the trade is much more optimistic.

Crimson Clover, according to general report, was about the most interesting item during the month. Even early in the month when many other varieties were neglected there was a good seasonable demand for Crimson. In the meantime there had been moderate arrivals from abroad, and hence holders were able to fill more orders on the old basis of 11 cents duty-paid, no effort being made to establish an advance as it was known that much larger quantities were on the way. At this time more talk was heard regarding the number of rejections, there being one report from Washington to the effect that during the six months ending June 30, 13 shipments of Crimson, aggregating 2,050 sacks, were prohibited entry under the Federal Seed Act on account of low germination. This was out of a total of 84 shipments, comprising 8,034 sacks, offered for entry. Hence it became more difficult for a time to buy choice germinating seed at 11 cents, many holders raising the price to 11½ @12 cents. Toward the end of the month demand continued fairly good, but there seemed to be more pressure to sell and in some quarters the price for good seed was lowered to 10½ cents duty-paid. Little or no interest was shown in foreign offers for forward shipment. Offers from France continued scarce even at 12 cents c. i. f., although

shippers in other countries were said to be offering at 7½@8 cents c. i. f. Arrivals during the month were 5,050 bags, compared with 150 during July.

Timothy had a rather unsettled and irregular month. At the outset the tone was easier as buyers were holding off while holders seemed more eager to sell at the old basis of 8 cents. At this writing, however, the general quotation is 7 cents, but the tone is said to be more stable. There were 1,220 bags exported during the month compared with about 330 in July.

Redtop was dull during the greater part of the month and at the outset the basis was about 1 cent lower at 26 cents. Later, although the trade generally was still in a waiting mood, holders became firmer and quotations ranged from 28 cents to 30 cents.

Red Clover was quiet and nominally unchanged during the month. In spite of the poor demand and the fact that arrivals increased to 1,860 bags, against 180 during July, holders refused to make concessions and at this writing are still quoting a jobbing basis of 37 cents for domestic seed and 27 cents duty-paid for imported. French Clover was offered for November-December shipment at 19½ cents c.i.f., but buyers showed little or no interest, evidently awaiting developments in connection with the Staining Law.

White Clover remained inactive throughout the month and the spot jobbing basis is nominally unchanged, viz: 35 cents duty-paid. Arrivals were 275 bags against 360 in July. Early in the month foreign shippers offered new crop seed for September-December shipment at 26½ cents c.i.f. without arousing interest. Later the basis was lowered to 25@26 cents c.i.f., which resulted in a fair business.

ALSIKE SEED CROP LARGER

Alsiike Clover seed yields in practically all of the important producing districts were larger than those of last year. The acreage in a majority of districts was also larger. The production is estimated by the United States Department of Agriculture to be about 25 per cent larger than that of last year, which was much below normal. As in the case of Red Clover, the Alsiike Clover crops have been small since 1922. The increase in production in this country will be offset largely by the marked decrease in Canada.

The unfavorable weather in the summer of 1925 and the drought this spring did not injure the Alsiike Clover seed crop to the same extent as they did Red Clover. Although the demand for Alsiike Clover seed this spring declined a little from the unusually good demand of the two preceding years, the revival of interest in this crop during the past three years has brought about an increase in the acreage. Much of this increase, however, was in sections that harvest the crop for hay instead of for seed.

The acreage for seed this year was reported to be the same as or larger than that of last year in all important sections except western New York, northern Illinois, Ohio, and northeastern Iowa. In general the increases were small.

The yield per acre was larger in all but one or two sections. The increases ranged mostly from 10-25 per cent. The average yield obtained by growers reporting amounted to 3.92 bushels, compared with 2.86 bushels last year.

Harvesting of the crop began a little earlier than last year in a majority of sections. Notable exceptions, however, were northeastern Minnesota and northeastern Wisconsin. The average dates for the beginning of harvest were reported as follows: July 10 to 15, southwestern and northwestern Ohio; July 22 to 27, central and northern Indiana; August 1 to 5, northern and central Illinois, southeastern Wisconsin, and southern Michigan; August 12 to 21, northeastern Wisconsin and northeastern Minnesota.

The Canadian production is estimated by the Seed Branch of the Canadian Department of Agriculture to be 6,000,000 pounds, compared with 12,000,000 in 1925 and 9,600,000 in 1924. Severe winter killing in 1926 and prolonged drought in the summer months of 1925, which affected the new seedings, were mainly responsible for the decreased production. On September 1 Canadian dealers were paying \$16-\$23 per 100 pounds for seed in the "rough".

The carryover, although somewhat larger than the record small carryover at this time last year, is much below normal. The movement of the new

crop has been very brisk and already 50 per cent or more of the crop has left growers' hands in several important producing districts.

NEW SEED TRADEMARKS

The following new seed trademarks were published in recent issues of the *Official Gazette* of the United States Patent Office: "Purity Quality" seeds, particularly cottonseed. Farmers Seed & Gin Company, Paris, Texas. Filed May 22, 1926. Serial No. 232,074. "Rex" oats for seed and barley for



seed. Stühr-Seidl Company, Minneapolis, Minn. Filed June 24, 1926. Serial No. 233,713. "Milseco" millet seed. A. G. Hagan, doing business as The Millet Seed Company, Donaldsonville, Ga. Filed June 10, 1926. Serial No. 233,002. Garden and field seeds. Morrison Seed Company, Spokane, Wash. Filed May 17, 1926. Serial No. 231,746.

RED CLOVER SEED CROP ABOUT SAME AS LAST YEAR

Red Clover seed production is estimated by the United States Department of Agriculture to be about the same as the small crop of last year. In most sections there were reductions in acreage, ranging from 5 to 40 per cent, but these were offset by increases in yield per acre in a number of sections.

This year's crop is the fourth consecutive small crop. Unfavorable weather conditions have not been responsible alone for the decreased production. During the past few years there has been a marked tendency to substitute other crops, particularly Sweet Clover and Alfalfa, for Red Clover.

The hot, dry summer of 1925 was extremely hard on sowings that were made in the spring of that year and from which sowings the bulk of the 1926 seed crop was expected to be obtained. Winter killing was further responsible for thinning out stands. Then it was too dry early this spring and too wet in a number of sections after the first (hay) crop was removed. Some or all of these detrimental conditions, however, in varying degrees, have been present during each of the past four years.

Grasshoppers did more damage than last year in a few sections, particularly in central Indiana and northwestern and southwestern Ohio. Elsewhere the damage was inconsequential or about the same as usual.

Western and southern Wisconsin, western Oregon, southern Idaho were the only important producing sections that indicated a larger acreage for seed this year than last year. Of the less important districts, southeastern Nebraska and northeastern Kansas showed signal increases in acreage. The reduction in acreage was most marked in southwestern Ohio, southern Indiana and southern Minnesota.

The yield per acre was reported to be smaller than last year in southern Illinois, central and southern Indiana, northwestern and southwestern Ohio, southern Minnesota, and southern Idaho. Elsewhere the yield was expected to be the same as or larger than that of last year, which was below normal. The average yield per acre of approximately 500 growers was one and one-third bushels, or 10-15 per cent larger than that of last year. Yields varied considerably in various sections of the same state. Among the most striking illustrations were the average yields of two-thirds bushels in southwestern and 1.9 bushels in southeastern Iowa.

European reports indicate a smaller production than usual in most of the producing countries. In general, too much rain, together with cool weather, induced too rank a growth for seed production. A large crop was expected in France until the end of July but later drought was reported to have done considerable damage.

Elmo Ragsdale and J. L. Park have opened a seed and plant store at Cornelia, Ga.

A store has been opened at Brawley, Calif., for the Aggeler & Musser Seed Company.

A new scale and dump have been installed by the Simmons Seed Company of Minot, N. D.

The F. & N. Seed Company of Garden City, Kan., has been sold to A. T. Faeth of Wellington.

The Rogers Bros. Seed Company of Chicago, is building a \$20,000 bean warehouse at Greeley, Colo.

The capital stock of the Valley Star Seed & Grain Products Company of San Juan and Edinburg, Texas, has been increased to \$21,000.

A grain and seed storeroom has been leased by the Hooton-Davis Seed Company adjacent to its seed cleaning plant at Lebanon, Ind.

A new seed house has been opened at Bartow, Fla., by Whittle & Lusk. The company will handle a full line of seeds and kindred supplies.

The seed pea department of the Gary Hay & Grain Company of Bozeman, Mont., has been taken over by the Montana Seed Company, Inc.

Harry Sunfield is now with the Ferguson Seed Farms, Sherman, Texas, in the position of sales manager in charge of the wholesale business.

The O. F. Jackson Seed Company, Inc., has been incorporated at Houston, Texas, capitalized at \$20,000. O. P. Jackson and others are interested.

An annex has been built to the seed house of Riedesel & Dryden of Windom, Minn. It was ready the first of September for business. They operate as the Windom Seed Company.

A wholesale seed and feed business is to be started at Goshen, Ind., for Sol and David Dembufsky. The firm in which they were both interested, C. Dembufsky & Sons, has been dissolved.

The Montana Seed Company has been incorporated at Helena, Mont., by C. B. Power and J. M. Power of Helena and E. A. Steiffle of Belgrade. The company will handle seeds, hay, wheat, oats, etc.

The Purcell Seed Company of Evansville, Ind., has started business in its new \$45,000 brick and reinforced concrete house. It has facilities for handling from 300 to 400 carloads of field seeds, animal and poultry feeds, etc. Guy Purcell is president.

A petition asks for a receivership and dissolution of the Tucker-Mosby Seed Company of Memphis, Tenn., which has been operated as a partnership by O. F. Tucker and John L. Mosby. The company is solvent but both parties want to wind up the affairs of the concern.

A modern and up-to-date seed cleaning plant and poultry feed mill was recently completed at Phoenix, Ariz., by the Five Points Seed & Feed Company which was established by the Capital Fuel & Feed Company last February. The company specializes in Alfalfa seed and Bermuda grass seed.

The Northwest Seed Growers, Inc., of Mount Vernon, Wash., has built a new seed cleaning establishment. It was ready for operation the first part of September. It has 3,500 square feet of floor space, and was one story high in front and two in back to accommodate the machinery and elevators.

The A. A. Berry Seed Company, which conducts a seed business at Clarinda, Iowa, has changed its name to the Berry Seed Company. This action was taken owing to the fact that A. A. Berry is no longer active in the company. The company is broadcasting again from Station KSO, on the old wave length of 241.8 meters. During the summer months the evening programs start at 8 o'clock; the noon day programs are from 12 to 1 and the company broadcasts every evening excepting Saturday and Sunday. The seed company is also erecting a new storage building 42x80 feet, three stories, adjoining its present concrete building which will make the storage building when complete 80x162 feet.

GRAIN TRADE PATENTS

Bearing date of July 13, 1926

Grain cleaning machine.—Cecil Benthon, Manchester, England, assignor to Henry Simon, Ltd., Manchester, England, a British company. Filed August 31, 1925. No. 1,592,752.

Treatment of seeds and the like with furfural.—Carl S. Miner, Chicago, Ill., assignor to The Quaker Oats Company, Chicago, Ill., a corporation of New Jersey. Filed July 5, 1923. No. 1,592,039.

Bearing date of July 20, 1926

Attrition mill.—Arthur A. Ambler, New Brun-

SEEDS

BETTER SEEDS; BETTER CROPS
PRUNTY SEED & GRAIN CO.
9 South Main St. SAINT LOUIS



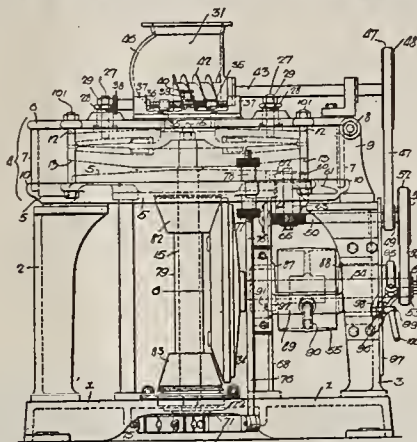
BUYERS—SELLERS, FIELD SEEDS
ED. F. MANGELSDORF & BRO.

Wholesale Field Seeds

First and Victor Sts., St. Louis, Mo.

wick, N. J., assignor to The Wolf Company, Chambersburg, Pa., a corporation of Pennsylvania. Filed January 29, 1923. No. 1,593,153. See cut.

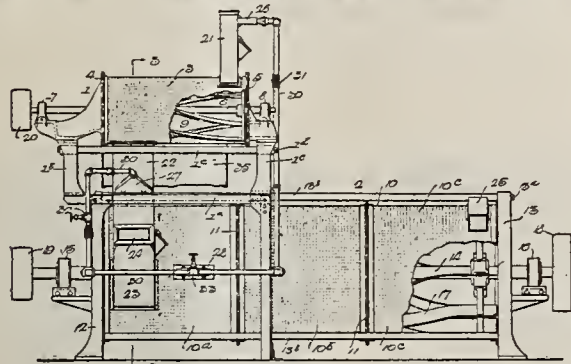
Claim: The combination of a casing consisting of a substantially cylindrical body, a top member and a bottom member; two grinding discs mounted in the casing between the end planes of the cylindrical body; means for rotating one of the said grinding discs; and means for supporting the other grinding disc



from the top member of the casing independently of the body, the said means being adjustable to permit the changing of the position of the said disc relatively to the top member and relatively to the rotary disc.

Method of and apparatus for washing grain.—Robert G. Hunt, Astoria, Ore., assignor to The Wolf Company, Chambersburg, Pa., a corporation of Pennsylvania. Filed October 3, 1925. No. 1,593,174. See cut.

Claim: The herein described process of washing grain which consists in mixing the grain with water, forming and bodily moving a thick layer of the grain, subjecting the moving thick layer to agitating action thereof whereby the grain berries are rubbed against each other to loosen and remove smut-balls, supplying

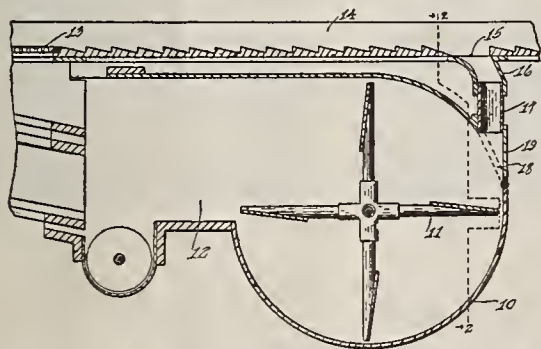


additional water to the grain, forming and bodily moving a thin layer of the grain, subjecting the moving thin layer to a mechanical abrading action at one surface thereof and to an agitating action at the other surface thereof whereby the grain berries are mechanically abraded to remove any remaining smut or other objectionable material and to effect rinsing.

Bearing date of July 27, 1926

Grain cleaner and saver.—Fred E. Hendrickson, Grand Valley, S. D. Filed January 12, 1925. No. 1,594,175. See cut.

Claim: The combination with a grain pan and sieve of a separator, the former being arranged to deliver grain to the latter and having an opening in the bottom thereof surrounded by a nipple, of a fan including a casing provided with an auxiliary air blast nipple



arranged below the nipple of the pan, a movable closure in said auxiliary blast nipple, and a flexible tube connected with and extending between the nipples of the casing and pan, a side of one end of said tube

(Continued on Page 182)

For Sale

MACHINERY

FOR SALE

One combination corn and cob separator and small grain cleaner. Price \$150. JOHN MURRAY & SON, West Jefferson, Ohio.

FOR SALE

Pulleys, 1,000; all sizes, solid cast iron, wood and steel split. Elevator belts and buckets and supplies. STANDARD MILL SUPPLY COMPANY, 501 Waldheim Building, Kansas City, Mo.

EUREKA COMBINATION DUST COLLECTOR

No. 34, in good running order. List price new, \$339. Our price, f.o.b. Keokuk, \$125. PURITY OATS COMPANY, Keokuk, Iowa.

FOR SALE

One No. 403 Eureka Receiving Separator, equipment A, new.

One No. 3 Eureka Receiving Separator.

One No. 3 Monitor Receiving Separator, style B.

One No. 2 Invincible Tri-Screen Receiving Separator, first class.

One No. 2 Unique Receiving Separator, nearly new.

One No. 5 Unique Receiving Separator, nearly new.

One No. 2-276 Eureka Cockle Separator.

One elevator, 50-ft. centers, 12x6 cups, iron boot.

M. B. McFEELY

Heed Bldg.

Philadelphia, Pa.

MACHINERY FOR SALE

One No. 5 Invincible Oat Clipper.

Two 50-h.p. Allis-Chalmers Motors.

One Williams Pulverizer, large size.

One Eureka Improved Batch Mixer.

One 9"x30" B. & L. Double Roller Mill.

One 36" Alfalfa Breaker.

One No. 453-A Eureka Cracked Corn Separator.

One No. 5 Monitor Dustless Cracked Corn Separator.

One 10"x41' steel spiral conveyor.

One 12"x12' steel spiral conveyor.

Two Bucket Elevators, 38' between centers.

Five Cyclone Dust Collectors.

Seven Style B Draver Percentage Feeders with master drive.

One 30'9" L. H. Cut Flight Conveyor.

One 8' Brown Portable Bag Piling Machine with motor.

One Richardson Automatic Sacking Scale, five bushels.

One Cincinnati Time Registering Clock.

One No. 4 Freeman's Grain Cleaner and Corn Sheller.

DIAMOND MILLS, Evansville, Ind.

ELEVATORS AND MILLS

FOR SALE IN NORTHERN ILLINOIS

Several grain elevators at small stations. Also handling lumber, coal and other side lines. HOLCOMB-DUTTON LUMBER COMPANY, Sycamore, Ill.

A REAL BARGAIN

South Dakota elevator for sale. Electrically equipped; first-class condition. Ample territory in good grain belt. F. A. KOHLHOFF, Stratford, S. D.

FOR SALE IN OCONOMOWOC, WIS.

A 20,000-bushel elevator, equipped for feed grinding. This plant is located in summer resort district in town of 6,000 people, with good local and farming feed trade. Terms attractive. ARMOUR GRAIN COMPANY, Milwaukee, Wis.

FOR SALE

Modern, electrically equipped grain elevator; also good feed, flour and coal storage. Doing good business. Ample territory in best grain section of northwestern Ohio. NORTHWESTERN OHIO, Box 9, care AMERICAN ELEVATOR AND GRAIN TRADE, 431 S. Dearborn St., Chicago, Ill.

Miscellaneous Notices

WANTED

Partner—too much for one man. Will accept part trade. This will stand inspection. HAWARDEN ROLLER MILLS AND ELEVATOR, Hawarden, Iowa.

FOR SALE

Bag holders for grain or potatoes. No hooks; does not tear the bag; height adjustable. Price \$3.95. Circular free. L. F. PERRIN CO., Port Huron, Mich.

WANTED

Position as manager of grain elevator. Years of experience in grain, coal and feed. Can furnish reference and bond. C. M. HAYSE, 1321 Maple St., Sioux City, Iowa.

BUFFALO, N. Y.

The Great Grain Center.

Rail, Water and Power Properties.

Personal, Confidential Service of

SPENCER S. KINGSLEY, Realtor, 63 Niagara St.

FLOUR AND MILL FEEDS

Mixed cars of flour and mill feeds in 100-pound sacks are our specialties. Would like to send you a trial order to convince you of the superiority of our products. ANSTED & BURK CO., Springfield, Ohio.

WANTED

Experienced manager for transfer grain elevator near Chicago. One who can buy, sell, clean and mix grain, and take small financial interest in the plant. A good going concern with established trade. EXPERIENCED MANAGER, Box 9, care AMERICAN ELEVATOR AND GRAIN TRADE, 431 S. Dearborn St., Chicago, Ill.

Land Opportunities

FOR SALE IN LOUISIANA

Five thousand acres cut-over pine land, suitable for fruit and other diversified farming. For terms and prices address B. E. SMITH LAND & LUMBER CO., INC., Alexandria, La.

FOR SALE

Widow sacrifices 80 acres near Elkhart, Ind. Forty thousand population. House; barn; level, clear; ready for acreage subdivision. Price \$4,500. Terms. COMSTOCK, Bristol, Ind.

FOR SALE, SIX MILES FROM ROCKFORD, ILL.

Beautiful country place. "The Dells," 432 acres, modern buildings, equipment and stock; ¾ productive, ¼ picturesque. Wonderful for golf course and subdividing for cottages and country homes. Near Mrs. McCormick's 1,600-acre Rock River Farms. C. HERBERT LEWIS, Owner, Rockford, Ill.

ILLINOIS FARM LANDS

Seventy-five dollars per acre for 190 acres; Illinois Greatest Bargain. Level; enough living water; wonderful pasture; grows Alfalfa, Sweet Clover without inoculation. Near school; seven-room two-story house complete, nearly new; outbuildings. Nicely located—four miles to Byron 90 miles to Chicago. Joins land that recently sold for \$150 per acre that is no better. Liberal terms. Don't wait, but write; come. ELI McNAMES, Byron, Ill.

being secured to said closure and adapted to be collapsed by said closure whereby to regulate the discharge of air upwardly through the tube and through the grain and chaff on the pan.

Dump car and door operating mechanism therefor.—Argyle Campbell, Chicago, Ill., assignor to Enterprise Railway Equipment Company, Chicago, Ill., a corporation of Illinois. Filed December 26, 1922. No. 1,593,748.

Door for grain cars.—John Jenkins, Stavely, Alberta, Canada. Filed January 15, 1926. No. 1,594,012.

Bearing date of August 10, 1926

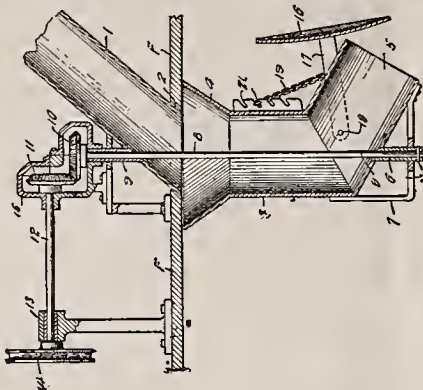
Direct connected burr mill unit.—Charles Truman Hibbard, Minneapolis, Minn., assignor, by mesne assignments, to Electric Machinery Manufacturing Company, Minneapolis, Minn., a corporation of Minnesota. Filed April 15, 1920. No. 1,595,605.

Bearing date of August 17, 1926

Device for uniformly distributing wheat in bins.—Iver P. Schei, Fergus Falls, Minn. Filed February 16, 1925. No. 1,596,026. See cut.

Claim: In a device for uniformly distributing wheat

in bins, the combination of a funnel terminating in a downwardly discharging spout, means for rotating the funnel, a disc having a convex face positioned in proximity to, but spaced from, the discharge end of the



funnel spout and disposed in a plane to intercept and divert material flowing from the spout arms affixed to the disc and operatively mounted on the funnel

spout, a chain attached to said arms, a ratchet bar to which the chain may be detachably engaged for adjusting the position of the disc relative to the lower portion of the mouth of the discharge spout for the purpose of effecting even distribution of light and heavy wheat in the mill bin.

Bearing date of August 3, 1926

Grain car door.—Cornell Flagstad, Minneapolis, Minn., assignor of one-half to John P. Jacobsen, Minneapolis, Minn. Filed September 17, 1923. No. 1,598,430.

Bearing date of August 24, 1926

Grain car door.—Malcol Rorabeck, Milford, Ont., Canada. Filed January 28, 1925. No. 1, 597,392.

Walter Ray Hunter, a feed dealer of Oxford Depot, N. Y., has been adjudged bankrupt. Seaman Miller is referee.

The Graves Seed Store of Omaha, Neb., has filed a petition in bankruptcy. Its assets are \$2,750 and liabilities \$5,837.51.

CHAMBER OF COMMERCE	MINNEAPOLIS	GRAIN RECEIVERS
Robinson Telegraphic Cipher Revised Edition Cloth Binding \$2.00 Leather Binding 2.25 MITCHELL BROTHERS PUBLISHING CO. 431 S. Dearborn Street Chicago, Ill.	Cereal Grading Co. W. T. FRASER, Vice Pres. & Mgr. GRAIN MERCHANTS CHOICE MILLING WHEAT & RYE	Twenty-five years' experience in selecting and forwarding choice wheat and rye for mills. Largest rye handlers in the West. Also shippers of oats, barley and screenings. Operating Elevator L 612 Chamber of Commerce MINNEAPOLIS. MINN.
BOARD OF TRADE	DULUTH	GRAIN RECEIVERS
YOU Can keep in touch with the news and reports of the Grain and Elevator world by reading the "American Grain Trade." SUBSCRIBE NOW—\$1.00 A YEAR.	WHITE GRAIN CO. SHIPPERS FANCY OATS MILL OATS SCREENINGS FEED WHEAT BARLEY RYE Write for Samples and Quotations DULUTH	
PRODUCE EXCHANGE	TOLEDO	GRAIN RECEIVERS
Robinson Telegraphic Cipher REVISED EDITION Cloth Binding \$1.75 Leather Binding 2.25 MITCHELL BROTHERS PUBLISHING COMPANY 431 S. Dearborn Street Chicago, Ill.	JOHN WICKENHISER & CO. Wholesale Grain Dealers TOLEDO, OHIO We make track bids and quote delivered prices. Solicit consignments of Grain and Clover Seed. Members Toledo Produce Exchange and Chicago Board of Trade. EVERY SHIPPER Should Receive Southworth's daily bids— WHEAT, CORN, OATS, RYE Southworth & Company, Toledo, Ohio FUMIGATION METHODS By PROF. WILLIS G. JOHNSON A complete practical treatise on fumigating grain elevators, flour mills, warehouses, etc. 313 pages. Well illustrated. Price \$2.00. Mitchell Bros. Publishing Company, 431 South Dearborn St., Chicago	When "SEEDY" Try C. A. King & Co. GRAIN AND SEED DEALERS Toledo, Ohio Like Billy Sunday, we deal in both cash and futures, Toledo and Chicago Born 1846 Read Our Boy Solomon J. F. ZAHM & CO. TOLEDO, OHIO Your future orders and consignments Grain or Seed Solicited

**BOARD
OF
TRADE**

CHICAGO

**GRAIN
RECEIVERS**

POPE & ECKHARDT Co.
COMMISSION MERCHANTS
GRAIN AND SEEDS

111 W. Jackson Blvd.

CHICAGO

Lamson Bros. & Co.
Grain
1874 Commission 1926
Merchants

Fifty-two Years of Service in the Grain Trade

166 W. Jackson Boul.
and
8 Board of Trade

Chicago

We Buy
Wheat---Corn---Oats---Barley---Rye
Send Samples
The Quaker Oats Co.
Cereal Millers

Grain Dept. 80 East Jackson Boulevard
CHICAGO

Armour Grain Company
CHICAGO, ILL.
GRAIN DEALERS
FUTURES ORDERS SOLICITED
Winnipeg, Liverpool and United States Markets
CONSIGNMENTS SOLICITED
CHICAGO ST. LOUIS MILWAUKEE
MINNEAPOLIS BUFFALO

We can now supply
Elwood's Grain Tables
\$2.00 per copy

H. M. PAYNTER
With ROGERS GRAIN COMPANY
Grain Commission
Correspondence Solicited
Postal Telegraph Building CHICAGO

Rosenbaum Grain Corporation
Grain Merchants—Exporters—Importers
Cash and Futures CHICAGO, ILLINOIS Private Wires

GEO. S. DOLE, Pres. FRANK HAINES, Sec.
J. H. DOLE & COMPANY
(Established 1852)
Commission Merchants, Grain and Seeds
We solicit your
CONSIGNMENTS
and orders in futures
327 South La Salle Street - - CHICAGO

"Since 1873"
J. J. BADENOGH CO.
GRAIN
COMMISSION MERCHANTS
320 Postal Telegraph Bldg., Chicago

RUMSEY & COMPANY
FOUNDED 1867
COMMISSION MERCHANTS
BOARD OF TRADE
CHICAGO

J. C. Shaffer Grain Co.
GRAIN MERCHANTS
CHICAGO

E. W. BAILEY & CO.
COMMISSION MERCHANTS
GRAIN, SEEDS AND PROVISIONS
72 Board of Trade CHICAGO

Established Over Forty Years
Hulburd, Warren & Chandler
208 S. La Salle St., Chicago
Stocks Bonds Grain Cotton

ON THE JOB
BRENNAN
OF CHICAGO
JOHN E. BRENNAN & CO.
Commission Merchants
CHICAGO



Wherever hay is handled, there the firm of
BRIDGE & LEONARD
is well and favorably known.
Consignments solicited. Market information furnished.
61-65 Board of Trade Chicago, Ill.

Clement, Curtis & Co.
Illinois Merchants Bank Bldg., Chicago
Members of all principal Exchanges.
Private wire service to all leading cities
in this country.

CORN
EXCHANGE



BUFFALO



GRAIN
RECEIVERS

Wheat-Rye-Corn-Barley-Oats

Shipped to

Eastern Grain, Mill and Elevator Corporation

Operators of Concrete Elevator, Central Elevator and Iron Elevator

5,000,000 BUSHELS CAPACITY

Will be properly cared for on arrival and show best possible results

Lewis Grain Corp.

A good firm to consign to

Corn—Oats—Soft Wheat—Barley

BUFFALO

NEW YORK

McConnell Grain Corporation

Strictly Commission and Brokerage

Buffalo

New York

Send your consignments to

Seymour-Wood Grain Co.

BUFFALO,

N. Y.

Globe Elevator Company

GRAIN AND FEED

*Accept our bids or consign, wheat, corn
oats, rye*

Chamber of Commerce

Buffalo, N. Y.

J. G. McKillen, Inc.,

RECEIVERS

Consignments a Specialty

BUFFALO

NEW YORK

LIVE GRAIN AND FEED ACCOUNTS
SOLICITED

BROKERAGE EXCLUSIVELY

HARRY J. HANNON

319 CHAMBER
OF COMMERCE

BUFFALO,
NEW YORK

The Real Market Place

for grain men is centered in
the advertising columns of the

"American Grain Trade"

BOARD
OF
TRADE



PEORIA



GRAIN
RECEIVERS

Louis Mueller, President

F. W. Mueller, Sec. & Treas.

MUELLER
(Incorporated)

**GRAIN
COMPANY**

Receivers and Shippers **GRAIN**

We Solicit Your Consignments of Grain
Room 39-41 Chamber of Commerce, Peoria, Ill.

P. B. & C. C. MILES

Established 1875

Incorporated 1910

PEORIA, ILL.

Handling Grain on Commission
Our Specialty

W. W. Dewey & Sons

GRAIN COMMISSION

26 Chamber of Commerce

PEORIA

- -

ILL.

YOU

can keep in touch with the Grain and Seed
world by reading the news and reports in the
"American Grain Trade".

SUBSCRIBE NOW—\$1.00 A YEAR

Turner-Hudnut Company

GRAIN COMMISSION

42-47 Chamber of Commerce, Peoria, Ill.

BOARD
OF
TRADE

❧ KANSAS CITY ❧

GRAIN
RECEIVERS

BOOKS FOR GRAIN DEALERS

WALLS, BINS AND GRAIN ELEVATORS, by
Milo S. Ketchum. Illustrated, 556 pages.
Price\$5.00
ROPP'S CALCULATOR, new and improved edi-
tion, with complete grain tables, and other
invaluable discount and stock tables.
Price\$1.00
ROBINSON'S TELEGRAPHIC CIPHER, re-
vised and enlarged. Price.....\$2.00
UNIVERSAL GRAIN CODE, and Feed Mill
Supplement. Price\$3.00

Any of the above sent postpaid
on receipt of price.

MITCHELL BROS. PUBLISHING CO.
431 S. Dearborn St. Chicago, Ill.

GET OUR BIDS TO ARRIVE



CONSIGNMENTS

GRAIN
&
HAY
EXCHANGE

❧ CINCINNATI ❧

BUYERS
&
SELLERS

THE EARLY & DANIEL CO.
HAY—GRAIN—FEED

SCHOLL GRAIN CO.
GRAIN EXCLUSIVELY

GRAIN
&
HAY
EXCHANGE

❧ PITTSBURGH ❧

GRAIN
RECEIVERS

HARPER GRAIN CO.
Wabash Building
Modern elevator facilities
at your command.

ESTABLISHED 1872
R. S. McCAGUE, Ltd.
Wholesale
Receivers and Shippers
Corn, Oats, Hay and Mill Feed
11th St. and Duquesne Way
Pittsburgh, Pa.

Fumigation Methods
By PROF. WILLIS G. JOHNSON
A complete practical treatise on fumigating
grain elevators, flour mills, warehouses, etc.
313 pages. Well illustrated. Price \$2.00.
MITCHELL BROS. PUBLISHING CO.
431 South Dearborn St. Chicago

GRAIN
RECEIVERS

❧ OTHER MARKETS ❧

GRAIN
RECEIVERS

CRAWFORDSVILLE, IND.

DENVER, COLO.

MILWAUKEE

CRABBS REYNOLDS TAYLOR CO.
Crawfordsville, Ind.
GRAIN
Clover and Timothy Seeds
Get in touch with us.

Ady & Crowe Merc. Co.
Denver, Colo.
GRAIN HAY BEANS
A. & C. Poultry Feeds

E. P. BACON CO.
Grain Commission Merchants
Sellers of Cash Grain and
Field Seeds on Consignment
MILWAUKEE—CHICAGO—MINNEAPOLIS

LEADING GRAIN RECEIVERS IN ALL MARKETS

BUFFALO, N. Y.

Basil Burns Grain Corporation, consignments.*
 Eastern Grain, Mill & Elevator Corporation, wheat, rye, corn, barley, oats.*†
 Globe Elevator Co., grain and feed.*
 Hannon, Harry J., grain and feed.
 McConnell Grain Corporation, commission and brokerage.*
 McKillen, Inc., J. G., receiver.*
 Seymour-Wood Grain Co., consignments.*

CEDAR RAPIDS, IOWA

Wilder-Murrell Grain Co., wholesale, grain, seeds, feeds.*

CHICAGO, ILL.

Armour Grain Co., grain dealers.
 Badenoch Co., J. J., grain commission merchants.*
 Bailey & Co., E. W., commission merchants.*
 Brennan & Co., John E., commission merchants.*
 Bridge & Leonard, hay, grain.*†
 Clement, Curtis & Co., commission merchants.*
 Dole & Co., J. H., commission merchants.*
 Hoit & Co., Lowell, com. grain, seeds.
 Hulbard, Warren & Chandler, grain, bonds, stocks, cotton.*
 Lamson Bros. & Co., commission merchants.*
 McKenna & Dickey, com. merchants.*
 Miller & Co., Albert, hay and produce.†
 Norris Grain Co., grain merchants.*
 Paynter, H. M., grain commission.
 Pope & Eckhardt Co., grain and seeds.*
 Quaker Oats Co., wheat, corn, oats, barley, rye.
 Rosenbaum Grain Corporation, grain merchants.
 Rumsey & Co., grain commission.*
 Shaffer Grain Co., J. C., grain merchants.*

CINCINNATI, OHIO.

Early & Daniel Co., hay, grain, feed.*†
 Scholl Grain Co., grain exclusively.

CLEVELAND, OHIO

Cleveland Grain & Milling Co., receivers and shippers.*†
 Shepard, Clark & Co., receivers, shippers, grain, millfeed, buckwheat.*

*Members Grain Dealers' National Association.

CRAWFORDSVILLE, IND.

Crabbs-Reynolds-Taylor Co., grain, seeds.*†

DENVER, COLO.

Ady & Crowe Mercantile Co., grain, hay, beans.*†

DECATUR, ILL.

Baldwin & Co., H. I., grain dealers.*

DES MOINES, IOWA

Lockwood, Lee, grain brokerage.*

DULUTH, MINN.

White Grain Co., grain and hay.*†

FORT DODGE, IOWA

Christensen, Geo., broker.

GREENVILLE, OHIO.

Grubbs Grain Co., E. A., wholesale grain, wheat, corn, oats.*

INDIANAPOLIS, IND.

Bingham Grain Co., receivers and shippers.*
 Cleveland Grain & Milling Co., grain dealers.*
 Kinney, H. E., Grain Co., grain, hay, feed.*†
 Wallace Good Co., grain, stocks, cotton.

KANSAS CITY, MO.

Moore-Seaver Grain Co., corn and oats.*

LITTLE ROCK, ARK.

Farmer Company, E. L., grain and feed brokers.*

MEMPHIS, TENN.

U. S. Feed Co., receivers and shippers.†

MILWAUKEE, WIS.

Bacon Co., E. P., grain commission.*
 Kamm Co., P. C., grain merchants.*

MINNEAPOLIS, MINN.

Cereal Grading Co., grain merchants.*
 Cargill Elevator Company, milling wheat.*

†Member National Hay Association

PEORIA, ILL.

Cole Grain Co., Geo. W., receivers and shippers.*
 Dewey & Sons, W. W., grain commission.*
 Miles, P. B. & C. C., grain commission.*†
 Mueller Grain Co., receivers and shippers.*
 Turner-Hudnut Co., grain commission.*

PHILADELPHIA, PA.

Rodgers, James J., flour, feed, grain.*

PITTSBURGH, PA.

Harper Grain Co., grain commission.
 McCague, R. S., grain and hay.*†

ST. LOUIS, MO.

Martin Grain Co., rec. exclusively.*†
 Hall Grain Co., Marshall, grain commission.*
 Mangelsdorf & Bro., Ed. F., seeds.
 Martin & Knowlton Grain Co., grain, hay, seeds.*†
 Nanson Commission Co., receivers, shippers.*†
 Picker & Beardsley Com. Co., grain, hay.*†
 Prunty, Chas. E., grain and seeds.
 Toberman Grain Co., grain, hay, seeds.*†

SIDNEY, OHIO

Chambers, V. E., wholesale grain and hay dealer.*
 Custenborder & Co., E. T., carlot grain.*
 Wells Co., J. E., wholesale grain, seeds.*

TIFFIN, OHIO

Sneath-Cunningham Co., grain and seeds.

TOLEDO, OHIO

De Vore & Co., H. W., grain, seeds.*
 King & Co., C. A., grain and seeds.*†
 Southworth & Co., grain and seeds.*†
 Wickenhisser & Co., John, grain dealers.*
 Zahm & Co., J. F., grain and seeds.*

WINCHESTER, IND.

Goodrich Bros., wholesale grain, seeds, hay.*†

UNIVERSAL GRAIN CODE

(AND MILL FEED SUPPLEMENT)

Compiled for use of

GRAIN AND MILLING TRADES

of the United States and Canada

SEND FOR A COPY NOW. PRICE \$3.00.

Mitchell Brothers Publishing Co., 431 South Dearborn St., Chicago, Ill.

Elevator Machinery and Supplies Flour and Feed Mill Machinery

PULLEYS, SHAFTING, GENERAL POWER TRANSMISSION MACHINERY, ROLL GRINDING AND CORRUGATING. LARGEST FACTORY AND STOCK IN THE WEST.

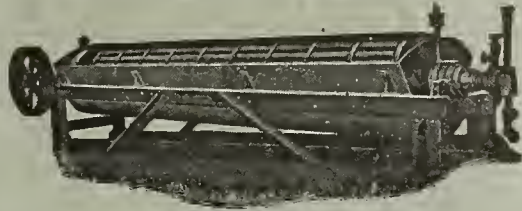
GREAT WESTERN MFG. CO.

General Offices and Works:
LEAVENWORTH, KANSAS

Warehouse and Sales Room:
1400-1402 West 12th Street
KANSAS CITY, MO.

SEE THAT YOUR CONTRACT CALLS FOR

THE CUTLER MEAL DRYER



SOLD BY ALL
MILL
FURNISHERS

Not An
Experiment

All Metal Steam Dryer

IN SUCCESSFUL USE 40 YEARS DRYING

CORN MEAL, HOMINY, BREWERS' GRITS AND MEAL, AND ALL CEREAL PRODUCTS. ALSO SAND, COAL DUST, GRAPHITE, CLAY, ORES, ETC.
Automatic in operation, requiring no attention

THE CUTLER CO., North Wilbraham, Mass.

CATALOG ON REQUEST

Books for Millers and Grain Dealers

WALLS, BINS AND GRAIN ELEVATORS, by Milo S. Ketchum. Illustrated, 556 pages.

Price\$5.00

ROPP'S CALCULATOR, new and improved edition, with complete grain tables, and other invaluable discount and stock tables. Price.....\$1.00

ROBINSON'S TELEGRAPHIC CIPHER, revised and enlarged.

Price\$2.00

MILLING KINKS, contains 169 illustrated handy devices of great value to the practical elevator operator and miller. Price...\$1.25

SHAFTING, PULLEYS AND BELTING, by Herbert E. Collins. An invaluable work for mills and elevators, or any other place where machinery is installed; well illustrated. Price\$1.50

FUMIGATION METHODS, by Prof. Willis G. Johnson. A complete practical treatise on the fumigation of elevators, mills, etc.; 313 pages; illustrated. Price...\$2.00

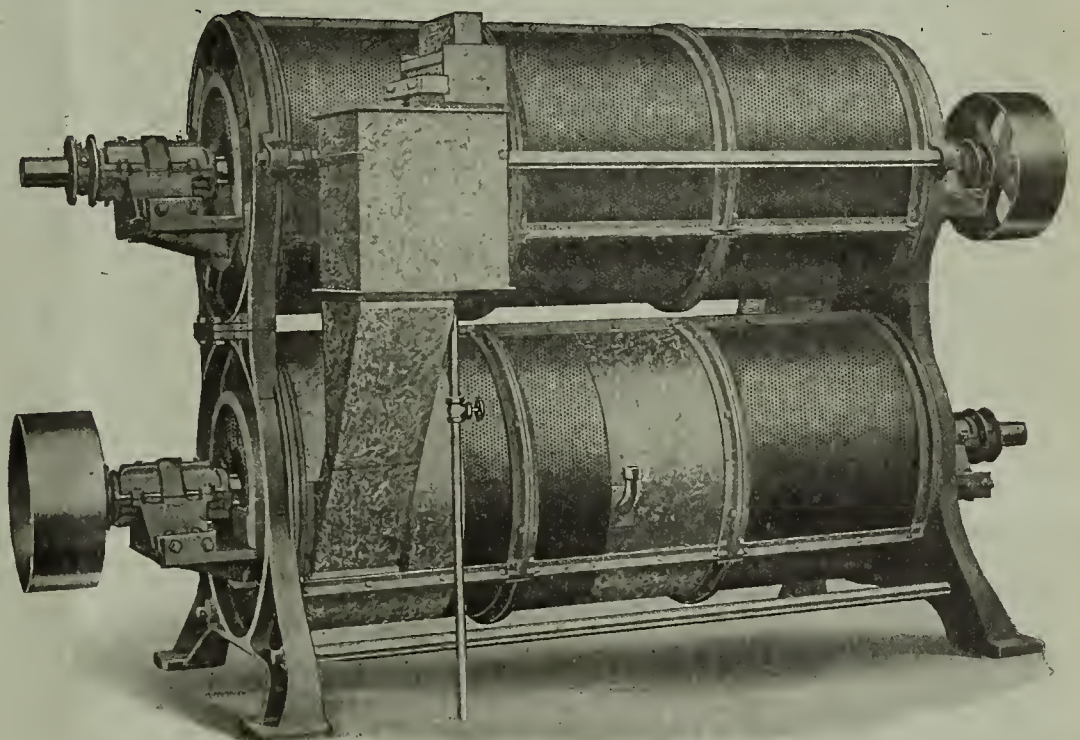
FEEDS AND FEEDINGS, by Prof. W. A. Henry. Illustrated, 613 pages. Price\$4.00

UNIVERSAL GRAIN CODE, and Mill Feed Supplement. Price..\$3.00

Any of the above sent postpaid
on receipt of price

**MITCHELL BROS.
PUBLISHING CO.**

431 S. Dearborn St. Chicago, Ill.



Why not take All your profits?

At this time of year, it will pay you many times over to consider the numerous advantages of the Wolf-Dawson Wheat Washer and Drier.

All forms of dirt, smut, and poison from the crease, beard, and germ are removed,—and the wheat berries are left whole in their bright, natural color.

You will not only obtain cleaner, better wheat,—but increased profit per bushel will naturally result.



The Sign of the Wolf-Dawson

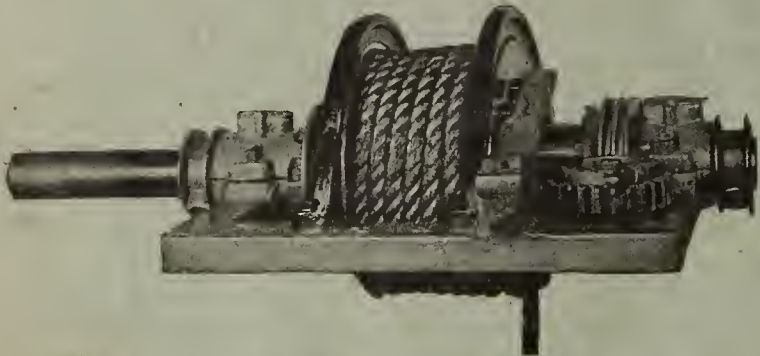
Let us send you a descriptive circular—together with actual performance figures showing what other dealers are obtaining with the Wolf-Dawson Wheat Washer and Drier.

THE WOLF COMPANY

64 Commerce St.
Chambersburg, Pa.

SOMETHING NEW WELLER POWER SHOVEL

(PATENTED)



One customer who tried a Weller Shovel said, "If an operator ever uses one of your new shovels he will never use any other make. It sure does the work and is easy to operate."

Claims of superiority for Weller Power Shovel—No counter weights—No counterweight ropes. Pulls at any point the shovel is stopped. Less Noise and vibration than any other shovel on the market. Positive in action. Never misses engaging the clutch. Easy on the operator. Occupies less space. Time is saved in erection. Shipped Ready to install.



Send for Power Shovel Circular

WE MAKE A COMPLETE LINE OF

GRAIN HANDLING EQUIPMENT

WELLER MFG. CO.

1820-1856 N. Kostner Ave.

CHICAGO, ILL.

SALES OFFICES

New York

Buffalo
Omaha

Baltimore

Salt Lake City

Pittsburgh

San Francisco

Detroit

St. Louis



Eight 500 bushel Morris Grain Driers

MORRIS *Dust Collecting* Automatic Grain Drier



Uses fresh air in both drier and cooler.

Automatically regulates the flow of grain.

Every kernel gets the same uniform treatment.

Strength of air current adjustable to provide maximum amount for any grain, light or heavy.

Removes and collects dust from drier building.

Prevents the danger of dust explosions and fire.

Only fresh air enters the drier house, ending the dust nuisance.

*Before you install any drier
investigate the Morris*

Everything for Every Mill and Elevator

The Strong-Scott Mfg Co.
Minneapolis Minn. Great Falls Mont.
In Canada: The Strong-Scott Mfg. Co. Ltd. Winnipeg



MOHAWK



RUBBER BELTING

For many years the Standard Belting for elevators.

Specify this belting when contracting to build or remodel.

Demand it when ordering direct.

The Gutta Percha & Rubber Mfg. Co.

301 W. Randolph St.

CHICAGO

New York

Boston

Philadelphia